



Letter of Transmittal

TO: Toll Bridge Program Oversight Committee
(TBPOC)

DATE: July 3, 2012

FR: Program Management Team (PMT)

RE: TBPOC Conference Call Materials Packet – July 10, 2012

Herewith is the TBPOC Conference Call Materials Packet for the July 10th conference call. The packet includes memoranda and reports that will be presented at the conference call. A Table of Contents is provided following the Agenda to help locate specific topics.

Final Agenda

TBPOC CONFERENCE CALL July 10, 2012, 10:00am – 10:30am

Topic	Presenter	Time	Desired Outcome
1. CHAIR'S REPORT	S. Heminger, BATA		Information
2. CONSENT CALENDAR			
a. TBPOC Meeting Minutes	A. Fremier, BATA		Approval
1. June 6, 2012 Meeting Minutes*			
b. Contract Change Orders (CCOs)	D. Noel, CTC		Approval
1. Yerba Buena Island Transition Structures (YBITS) No. 1 CCO 115 (Eastbound Pre-Stressing Delay Mitigation)*			
2. YBITS No. 1 CCO 141 (Skyway and Oakland Touchdown No. 1 Security Enhancements)*			
3. YBITS No. 1 CCO 905 (Design and Install SCADA Remote Monitoring and Control System)*			
3. PROGRESS REPORTS			
a. Project Progress and Financial Update June 2012**	A. Fremier, BATA		Approval
4. PROGRAM ISSUES			
a. Communications Protocol	PMT	5 min	Information
b. New Benicia-Martinez Bridge Foundations***	P. Lee, BATA	10 min	Approval
c. Bridge Opening Update	S. Maller, CTC	10 min	Information
5. SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES			
a. YBITS2 Addendum No. 4 Request*	T. Anziano, CT	5 min	Approval
6. OTHER BUSINESS			
Next TBPOC Meeting: August 21, 2012, 1:00 PM – 3:00 PM 325 Burma Road, Oakland, CA			

* Attachments

**Attachments at end of binder

***Attachments forthcoming

Table of Contents

TBPOC CONFERENCE CALL July 10, 2012

INDEX TAB	AGENDA ITEM	DESCRIPTION
1	1	CHAIR'S REPORT
2	2	CONSENT CALENDAR a. TBPOC Meeting Minutes 1) June 6, 2012 Meeting Minutes* b. Contract Change Orders (CCOs): 1) Yerba Buena Island Transition Structures (YBITS) No. 1 CCO 115 (Eastbound Pre-Stressing Delay Mitigation)* 2) YBITS No. 1 CCO 141 (Skyway and Oakland Touchdown No. 1 Security Enhancements)* 3) YBITS No. 1 CCO 905 (Design and Install SCADA Remote Monitoring and Control System)*
3	3	PROGRESS REPORTS a. Project Progress and Financial Update June 2012**
4	4	PROGRAM ISSUES a. Communications Protocol b. New Benicia-Martinez Bridge Foundations*** c. Bridge Opening Update
5	5	SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES a. YBITS2 Addendum No. 4 Request*
6	6	OTHER BUSINESS

* Attachments

** Attachments at end of binder

*** Attachments forthcoming

ITEM 1: CHAIR'S REPORT

No Attachments

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** July 3, 2012

FR: Andrew Fremier, Deputy Executive Director, Operations, BATA/MTC

RE: Agenda No. - 2a1
Consent Calendar
Item- TBPOC Meeting Minutes
June 6, 2012 Meeting Minutes

Recommendation:
APPROVAL

Cost:
N/A

Schedule Impacts:
N/A

Discussion:
The Program Management Team has reviewed and requests TBPOC approval of the June 6, 2012 Meeting Minutes.

Attachment(s):
June 6, 2012 Meeting Minutes



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

MEETING MINUTES

June 6, 2012, 12:00pm – 1:30pm

1120 N Street, Sacramento

TBPOC – PMT pre-briefing: 12:00pm – 12:30pm

TBPOC meeting: 12:30pm – 1:30pm

Attendees: TBPOC Members: Steve Heminger (Chair), Bimla Rhinehart and Malcolm Dougherty
PMT Members: Tony Anziano, Andrew Fremier and Stephen Maller
Participants: Michele DiFrancia, John Goodwin, Ted Hall, Beatriz Lacson, Rick Land, Peter Lee, Brian Maroney, Bart Ney, Dina Noel and Deanna Vilchek

Convened: 12:50 PM

Items		Action
1.	CHAIR'S REPORT <ul style="list-style-type: none">The Chair related that he visited the East Span recently.	
2.	CONSENT CALENDAR <ul style="list-style-type: none">a. TBPOC Meeting Minutes<ul style="list-style-type: none">1. May 3, 2012 Conference Call Minutes2. May 28, 2012 Conference Call Minutesb. Contract Change Orders (CCOs)<ul style="list-style-type: none">1. Self-Anchored Suspension Span (SAS) CCO 213 (Quality Control), \$3,006,6162. Yerba Buena Island Transition Structures (YBITS) No. 1 CCO 21-S2 (Additional Funds for Storm Water Pollution Prevention), \$1,500,0003. YBITS No. 1 CCO 68-S1 (Additional Funds for Frame 2 Elevator Operation), \$550,000• Item 2b1 was pulled from Consent Calendar for discussion.○ In response to the Chair's query as to	<ul style="list-style-type: none">The TBPOC APPROVED the Consent Calendar minus Item2b1.The TBPOC APPROVED CCO 213, as presented.

(Continued)

Items	Action
<p>why CCO 213 was not covered by CCO 160, T. Anziano indicated that CCO 213 was scoped out after CCO 160 was approved.</p>	
<p>3. PROGRESS REPORTS</p> <p>a. TBSRP Project Progress and Financial Update May 2012</p> <ul style="list-style-type: none"> • A. Fremier indicated that the May 2012 monthly report had been approved by the PMT through TBPOC-delegated authority. He requested TBPOC confirmation of this approval. 	<ul style="list-style-type: none"> • The TBPOC confirmed PMT APPROVAL of the Project Progress and Financial Update May 2012 under a delegated TBPOC authority.
<p>b. PROGRAM ISSUES</p> <p>a. Bridge Safety and Security</p> <ul style="list-style-type: none"> • Not discussed. <p>b. Bridge Opening</p> <ul style="list-style-type: none"> • S. Maller reported that a liaison committee has been formed with the Bay Bridge Alliance (BBA) to coordinate communication between BBA and the TBPOC via the PMT on items pertinent to the opening of the New East Span. ○ J. Goodwin handed out a June 1 copy of the Memorandum of Understanding that showed differences between this version and the Department's edits provided in an earlier version. ○ TBPOC revisions were discussed in various sections, including Recitals, Merchandising Activities, Costs, and Encroachment Permit. ○ The Chair noted that the revisions made should be considered as negotiating instructions, with final TBPOC approval to be made via a conference call. <p>c. Gateway Park – Army Land Transfer Letter</p> <ul style="list-style-type: none"> • S. Maller presented for TBPOC approval a draft letter to the SF Bay Area Congressional Delegation from the Gateway Park Working Group (GPWG) of which the TBPOC represents one- 	<ul style="list-style-type: none"> • Discussion deferred to the next TBPOC meeting. • J. Goodwin to revise MOU per TBPOC edits. • The TBPOC APPROVED the letter to the SF Bay Area Congressional Delegation; staff to propose to the GPWG that a letter to the U.S. Army/

(Continued)

Items	Action
<p>third membership. The letter is asking for assistance in expediting the remediation and transfer of U.S. Army land to the East Bay Regional Park District, to allow development of the Gateway Park project.</p> <p>d. Foundation Inspections Update</p> <ul style="list-style-type: none"> Discussed at the TBPOC/PMT pre-briefing. 	<p>Secretary of Defense L. Panetta be sent out concurrently.</p>
<p>c. SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES</p> <p>a. Corridor Update/Schedule</p> <ul style="list-style-type: none"> T. Anziano provided the following contract highlights: <ul style="list-style-type: none"> YBITS1 and main span work are both on schedule. OTD2 contractor Flatiron West, Inc. is now on site to begin construction. A cable band issue on the SAS project was quickly turned around with minor loss of float time. SSO Labor Day 2013 remains on schedule. More certainty in the SSO schedule is anticipated after load transfer is completed. 	
<p>5. ANTIOCH/ DUMBARTON BRIDGE SEISMIC RETROFIT UPDATES</p> <p>a. Update</p> <ul style="list-style-type: none"> T. Anziano gave highlights of ongoing field work. <u>Dumbarton</u>: <ul style="list-style-type: none"> ➤ The full-bridge closure over the Memorial Day weekend was a success. ➤ There is a high level of confidence going into the next full-bridge closure over Labor Day 2012 weekend. ➤ Contract is forecast to complete in early 2013. 	

(Continued)

Items		Action
6. OTHER BUSINESS		
<ul style="list-style-type: none">• The Chair signed the TBPOC letter responding to the Friends of the Gateway (FOG) letter re: salvaging significant components of the existing East Span.• M. Dougherty will be unable to attend the TBPOC July 5, 2012 meeting.• The TBPOC August 2, 2012 meeting is cancelled.		<ul style="list-style-type: none">• Staff to reschedule the July 5, 2012 TBPOC meeting.

Adjourned: 1:30 PM

TBPOC MEETING MINUTES

June 6, 2012, 12:00pm – 1:30pm

APPROVED BY:

STEVE HEMINGER, TBPOC Chair
Executive Director, Bay Area Toll Authority

Date

BIMLA G. RHINEHART, TBPOC Vice-Chair
Executive Director, California Transportation Commission

Date

MALCOLM DOUGHERTY
Director, California Department of Transportation

Date

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** July 10, 2012

FR: Dina Noel, Assistant Deputy Director Toll Bridge Program, CTC

RE: Agenda No. - 2b1

Item- Consent Calendar – Contract Change Orders (CCOs)
Yerba Buena Island Transition Structures (YBITS) No. 1
CCO 115-S0 – Eastbound Pre-stressing Delay Mitigation

Recommendation:

APPROVAL

Cost:

\$1,090,090.00

Schedule Impacts:

N/A

Discussion:

CCO 115-S0 in the amount \$1,090,090.00 will mitigate potential delays to the pre-stressing of Frame 2 of the eastbound structure.

CCO 72-S1, which established milestones to turn over the Hinge K area to the SAS contract, called for the Department to expedite the pre-stressing of the YBITS structure which could impact the milestone dates. Consistent with CCO 72-S1, CCO 113 was issued in February 2012 to expedite the pre-stressing on the westbound structure at a cost of \$732,170.00. CCO 115-S0 will expedite the pre-stressing on the eastbound structure.

The work includes installing and stressing 92 separate longitudinal tendons. Due to the risk of installing these tendons over the 290 meter length of the frame, the contractor will perform additional pre-inspection measures in order to identify any blockages or access issues, will pre-fabricate the 92 tendons off-site to enable the tendons to be pulled through the stressing ducts as one unit in lieu of multiply strands being pushed and will provide additional labor and equipment resources to expedite the prestressing operations. The contractor will work 2 crews at double shifts at 7 days per week over the anticipated 7-week duration of the tendon installation and stressing operation.

Risk Management:

As of the first quarter of 2012, the project change order log carried \$650,000.00 of the proposed cost, supplemented by CCO #1110, a risk allowance, ranging from \$300,000.00 to \$1,000,000.00. Thus the change order cost of \$1,090,090.00 falls well within the total estimated range of \$950,000 to \$1,650,000.00.

Attachment(s):

1. Draft CCO 115-S0
2. Draft CCO Memo 115-S0
3. Approved Copy of CCO 72-S1

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 115	Suppl. No. 0	Contract No. 04 - 0120S4	Road SF-80-12.7/13.2	FED. AID LOC.: NO FED AID
-----------------	---------------------	---------------------------------	-----------------------------	----------------------------------

To: M C M CONSTRUCTION INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Adjustment of Compensation at Lump Sum:

Provide additional resources for the pre-stressing work at Frame 2 of the eastbound structure as outlined below in order to mitigate potential delays to the project milestones established under Change Order No 72, Supplement No. 0 and No. 1:

- 1) Perform additional pre-installation inspection to ensure all ducts are clear, to verify all vents are accessible and functional and to verify all drains are properly sealed. Mandrels shall be pulled through the ducts to verify proper clearance and inline camera inspection shall be performed if necessary.
- 2) Pre-fabricate all stressing tendons off-site.
- 3) The prestressing subcontractor shall work two 10-hour shifts per day for 7 days each week with a minimum of 16 trade laborers each day through the completion of the Frame 2 stressing work. Additional equipment shall be mobilized to the project site to support the increased crew size.

For all additional cost resulting from the mitigation efforts described above, the Contractor shall be compensated an agreed lump sum \$1,090,090.00 which constitutes full and final compensation, including all markups, for all additional costs complete in place.

In accordance with Change Order No. 72, Supplement No. 1, there shall be no time adjustment to the milestone dates established under that change order as a result of this change.

Estimated cost of Adjustment of Compensation at Lump Sum\$1,090,090.00

Estimated Cost: Increase ☒ Decrease ☐ **\$1,090,090.00**

By reason of this order the time of completion will be adjusted as follows: 0 days

Submitted by

Signature	Resident Engineer William Howe, Senior R.E.	Date
------------------	---	-------------

Approval Recommended by

Signature	Principal T.E. Mike Forner	Date
------------------	--------------------------------------	-------------

Engineer Approval by

Signature	Principal T.E. Mike Forner	Date
------------------	--------------------------------------	-------------

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date
------------------	-------------------------------	-------------

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 5/24/2012 Page 1 of 2

TO: Deanna Vilcheck, ACM /		FILE: E.A. 04 - 0120S4		
FROM: William Howe, Senior R.E.		CO-RTE-PM SF-80-12.7/13.2		
FED. NO. NO FED AID				
CCO#: 115	SUPPLEMENT#: 0	Category Code: CHMX	CONTINGENCY BALANCE (incl. this change) \$58,252,430.40	
COST: \$1,090,090.00 INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
CCO DESCRIPTION: EB Prestressing Delay Mitigation			PROJECT DESCRIPTION: YBITS-1 (Yerba Buena Island Transition Structures)	
Original Contract Time: 1390 Day(s)	Time Adj. This Change: 0 Day(s)	Previously Approved CCO Time Adjustments: 0 Day(s)	Percentage Time Adjusted: (including this change) 0 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 9

THIS CHANGE ORDER PROVIDES FOR:

Mitigating potential delays to the pre-stressing of Frame 2 of the eastbound structure.

This project, the Yerba Buena Island Transition Structure (YBITS), provides for the construction of two bridges which will connect eastbound and westbound traffic on the new east span of the San Francisco Oakland Bay Bridge (SFOBB) to the existing Yerba Buena Island (YBI) tunnel. The structures are comprised of concrete box girder bridges each approximately 50 meters high and 450 meters in length.

The Toll Bridge Program Oversight Committee (TBPOC) has established a goal of the Seismic Safety Opening (SSO) of the new SFOBB east span by 2013. In order to achieve this SSO, the completion of the main portions of the YBITS structure has been set for November of 2012 with Change Order No. 72, Supplement No. 1 establishing a milestone for this completion date. The prestressing of the eastbound structure currently falls on the critical path for this completion date. As a condition of Change Order No. 72, Supplement No. 1, which was approved by the TBPOC on December 1, 2011, the Department committed to mitigate any potential delays to the prestressing operation. Change Order No. 113 was issued in February of 2012 to mitigate the pre-stressing work on the westbound structure. This change order provides for the mitigation of the pre-stressing on the eastbound structure.

The eastbound structure is comprised of 2 separate pre-stressed concrete box girder frames. Frame 1 spans approximately 160 meters with Frame 2 spanning approximately 290 meters. Under this change order, Frame 1 will be pre-stressed per plan as the work doesn't affect the controlling operation.

The Frame 2 prestressing includes installing and stressing 92 separate longitudinal tendons. Due to the risk of installing these tendons over the 290 meter length, this change order provides for the contractor to take the following measures in order to mitigate potential risks to the completion milestones:

- 1) Perform additional pre-inspection measures in order to identify any blockages or access issues prior to the installation of the tendons.
- 2) Pre-fabricate the 92 tendons off-site to enable the tendons to be pulled through the stressing ducts as one unit in lieu of multiply strands being pushed.
- 3) Provide additional labor and equipment resources to expedite the prestressing operations.

This mitigating work has been reviewed and approved by Brian Maroney, Toll Bridge Program Manager.

The major costs associated with this work pertain to the Frame 2 tendon pre-fabrication and the additional labor and equipment resources being provided. The contractor will have to provide a warehouse facility to in order to fabricate the 290 meter long tendons and will have to double handle each of the 92 tendons. Additional labor and equipment will be provided to ensure the stressing ducts are clear prior to installing the tendons. The contractor will also provide added crews and work double shifts 7 days per week over a 5-week period during the actual pre-stressing work and mobilize several sets of equipment to the jobsite to support the increased crews. Premium time labor costs and inefficiencies will be compensated

CONTRACT CHANGE ORDER MEMORANDUM

EA: 0120S4 CCO: 115 - 0

DATE: 5/24/2012

Page 2 of 2

as part of this change.

Compensation shall be paid as an adjustment of compensation at an agreed lump sum of \$1,090,090.00 which shall be financed from the contract's contingency funds. A detailed cost analysis is on file.

In accordance with the provisions of Change Order No. 72, Supplement No. 1, there shall be no adjustment of contract time as a result of this change.

Maintenance concurrence is not required as this change doesn't affect any permanent roadway features.

CONCURRED BY:			ESTIMATE OF COST		
Construction Engineer:	William Howe	Date		THIS REQUEST	TOTAL TO DATE
Bridge Engineer:	Mehran Ardakanian	Date	ITEMS	\$0.00	\$0.00
Project Engineer:	Bob Zandipour, Design	Date	FORCE ACCOUNT	\$0.00	\$0.00
Project Manager:	Ken Terpstra	Date	AGREED PRICE	\$0.00	\$0.00
FHWA Rep.:		Date	ADJUSTMENT	\$1,090,090.00	\$1,090,090.00
Environmental:		Date	TOTAL	\$1,090,090.00	\$1,090,090.00
Other (specify):		Date	FEDERAL PARTICIPATION		
Other (specify):		Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING		
District Prior Approval By:		Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)		
HQ (Issue /Approve) By:		Date	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
Resident Engineer's Signature:		Date	FEDERAL FUNDING SOURCE PERCENT _____ _____ _____		

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 72	Suppl. No. 1	Contract No. 04 - 0120S4	Road SF-80-12.7/13.2	FED. AID LOC.: NO FED AID
---------	--------------	--------------------------	----------------------	---------------------------

To: M C M CONSTRUCTION INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

The following 3 modifications shall be made to Change Order No. 72:

1) Due to all Department delays and impacts, incurred prior to November 1, 2011, to the work concerning the completion of the prestressing milestone established under Change Order No. 72, this change order shall grant a 78 working day extension to all dates in that change order. As such the \$50,000.00 calendar day incentive shall be paid for each calendar day prior to March 19, 2013 that the Contractor achieves the completion of the prestressing of all frames as defined with this March 19, 2013 date superseding the December 31, 2012 incentive date established under Change Order No. 72. This incentive payment shall not exceed \$7,500,000.00.

2) The Designated Portion of the Work 3 shall be completed by November 16, 2013 in lieu of the August 30, 2013 date established under Change Order No. 72. In the event the completion of the milestone for the prestressing of all frames is completed prior to March 19, 2013, the Designated Portion of the Work 3 shall be completed 1 day earlier for each day prior to March 19, 2013 that the prestressing milestone is achieved except that the work will not be completed earlier than July 5, 2013. The liquidated damages, as established under Change Order No. 72 shall continue to apply at \$50,000.00 per day with these damages starting on the 62nd day after the specified completion date for the Designated Portion of the Work 3 as defined under this change order.

3) The 20 days of inclement weather established under Change Order No. 72 shall be reset to 10 days from November 1, 2011 through the completion of the milestone work. The Contractor will plan for up to 10 days on which they are prevented by inclement weather from working on the controlling operations required to achieve the milestone of the completion of the prestressing of all frames. In the event the Contractor realizes more than 10 days of inclement weather effecting the controlling operations, the prestressing milestone shall be extended 1 day for each day over 10 days of inclement weather that is incurred. A day of inclement weather shall be defined as specified in Section 8-1.06 "TIME OF COMPLETION" of the Contract Standard Specifications.

In addition to the modifications made to Change Order No. 72, this change order shall establish 3 additional milestones related to the completion of the westbound and eastbound structures and eliminates the construction of the Hinge K Closure from the Contract as defined herein.

The 3 milestones being established under this change order shall be defined as follows:

Milestone 1 - The Contractor shall complete all prestressing work of Frame 2 of the Westbound structure and remove all, equipment and other materials up station from the centerline of Bent W3L (W Line Sta. 55+28.000) from the structure itself, the area directly under the structure and the area under the structure to the left of the W Line. The Contractor shall vacate this area as described in order to achieve Milestone 1. As part of this work, the Contractor shall leave in place all falsework from Bent W3L through Bent W2L except that all formwork and form bracing above the falsework soffit deck shall be removed. The Contractor shall be allowed access into this vacated area during concrete pours between Bents W3R and W2R of the eastbound structure. Any additional access into this vacated area shall be allowed to the extent that permission is granted by the Self Anchored Suspension Bridge Contract (04-0120F4).

Milestone 2 - The Contractor shall complete all prestressing work of Frame 2 of the Eastbound structure and remove all equipment and other materials up station from the centerline of Bent W3R (E Line Sta. 55+20.546) from the structure itself, the area directly under the structure and the area under the structure to the left of the E Line. The Contractor shall vacate this area as described in order to achieve Milestone 2. As part of this work, the Contractor shall leave in place all falsework from Bent W3R through Bent W2R except that all formwork and form bracing above the falsework soffit deck shall be removed. Any access into this vacated area shall be allowed to the extent that permission is granted by the Self Anchored Suspension Bridge Contract (04-0120F4).

Milestone 3 - The Contractor shall vacate the area up station from the centerline of Bent W4L (W Line Sta. 54+43.200) and from the centerline of Bent W4R (E Line Sta. 54+38.032) from the structures themselves, the area directly under the structures and the area under the structure to the left of the E Line. The Contractor shall be allowed access into this

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 72	Suppl. No. 1	Contract No. 04 - 0120S4	Road SF-80-12.7/13.2	FED. AID LOC.: NO FED AID
---------	--------------	--------------------------	----------------------	---------------------------

vacated area in order to construct the concrete barrier (Type 732 Modified and Type K) and to install the removable concrete counterweight (bikepath) between Bent W4R and Hinge K. Any additional access into this vacated area shall be allowed to the extent that permission is granted by the Self Anchored Suspension Bridge Contract (04-0120F4).

The completion dates associated with the above defined milestones are listed below:

Milestone 1 -May 1, 2012

Milestone 2 -November 1, 2012

Milestone 3 -December 31, 2012

The following provisions shall pertain to the completion of the milestones established under this change order:

- 1) The Contractor shall provide milestones within the Contract's progress schedule that establishes the completion of the 3 milestones as identified under this change order.
- 2) The Contractor will plan for up to 10 days from November 1, 2011 through the completion of the work on which they are prevented by inclement weather from working on the controlling operations required to achieve the 3 milestones established under this change order. In the event the Contractor realizes more than 10 days of inclement weather effecting the controlling operations, the milestone dates shall be extended 1 day for each day over 10 days of inclement weather that is incurred. A day of inclement weather shall be defined as specified in Section 8-1.06 "TIME OF COMPLETION" of the Contract Standard Specifications.

This intent to complete the milestones established under this change order and Change Order No. 72 is undertaken with the full comprehension of all Department changes to the Contract that have been transmitted to the Contractor prior to November 1, 2011 and no time extension shall be granted to the milestone dates as a result of these changes. Any outstanding direct costs, including markup, associated with these changes shall remain compensable and shall be compensated under separate change orders with no time extensions granted to the work.

As a result of this change order, no Contract time extension shall be granted for any Department delays or impacts incurred prior to November 1, 2011.

The construction of the Hinge K Closure shall be eliminated from the Contract as defined by the 7 items of work below:

- 1) The Contractor shall furnish to the project site the Hinge KW and KE seismic joints along with all interior and exterior bent plates for the steel barrier at Hinge KW and Hinge KE as specified under the Contract and as modified under Change Order No. 100. The installation of the seismic joints and steel barrier shall be eliminated from the Contract.
- 2) The construction of all structural concrete and bar reinforcing steel for the Hinge K Closure shall be eliminated from the Contract.
- 3) The placement of the minor concrete (concrete ballast) at Hinge K shall be eliminated from the Contract.
- 4) The concrete barrier (Type 732 Modified) shall be installed up to the centerline of Bents W3L and W3R on the eastbound and westbound structures. The concrete barrier up station from these bents (including all electrical conduit, pull boxes and appurtenances inside the barrier) shall be eliminated from the Contract.
- 5) The placement of the counter weights prior to the placement of the Hinge K Closure concrete shall be eliminated from the Contract.
- 6) Furnishing and placing the polyester concrete overlay (50MM) shall be eliminated from the Contract.
- 7) Installation of the Hinge K bearing assembly shall be eliminated from the Contract.

Estimate of Decrease in Contract Item at Contract Price:

Item No. 90: STRUCTURAL CONCRETE BRIDGE
 -502 M3 (-1.53%) @ \$855.00 /M3 = -\$429,210.00 (-1.16%)

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 72	Suppl. No. 1	Contract No. 04 - 0120S4	Road SF-80-12.7/13.2	FED. AID LOC.: NO FED AID
---------	--------------	--------------------------	----------------------	---------------------------

Item No. 94: MINOR CONCRETE (CONCRETE BALLAST)				
-36 M3	(-100.00%)	@ \$600.00 /M3	=	-\$21,600.00 (-100.00%)
Item No. 99: FURNISH POLYESTER CONCRETE OVERLAY				
-38 M3	(-100.00%)	@ \$3,000.00 /M3	=	-\$114,000.00 (-100.00%)
Item No. 100: PLACE POLYESTER CONCRETE OVERLAY				
-765 M2	(-100.00%)	@ \$20.00 /M2	=	-\$15,300.00 (-100.00%)
Item No. 102: INSTALL HINGE K BEARING ASSEMBLY				
-4 EA	(-100.00%)	@ \$15,000.00 /EA	=	-\$60,000.00 (-100.00%)
Item No. 110: BAR REINFORCING STEEL (BRIDGE)				
-181300 KG	(-2.85%)	@ \$1.70 /KG	=	-\$308,210.00 (-2.30%)
Item No. 149: CONCRETE BARRIER (TYPE 732 MODIFIED)				
-183 M	(-10.07%)	@ \$400.00 /M	=	-\$73,200.00 (-20.52%)

Estimated Total Cost for Decrease in Contract Item.....(\$1,021,520.00)

There shall be no adjustment pertaining to Section 4-1.03B of the Standard Specifications, for any decreased or eliminated item quantities resulting from this change.

The description of Designated Portion of Work 3 is modified to exclude any requirement relative to the traffic worthiness in the areas of the Eastbound structure for which work is eliminated by this change order.

The quantity shown herein for Items No. 90, 94, 99, 100, 102, 110 and 149, when combined with the quantities specified in the Engineer's estimate, and as modified by any previous change orders, shall be the final quantity for which payment will be made.

Adjustment of Compensation at Lump Sum:

The Contractor shall plan and execute the work of the Contract with the intent to complete the 3 milestones by the dates established under this change order.

In addition to the lump sum of \$12,181,065.00 provided for under Change Order No. 72, the Contractor shall be compensated an additional agreed lump sum of \$10,470,000.00 for their efforts to complete Milestones 1 through 3 by the dates established under this change order. Said compensation shall be paid in monthly progress payments to the Contractor.

In addition to the lump sum compensation paid under this change order, the Contractor shall be paid incentive payments pertaining to Milestone 1 through 3 as defined below:

- 1) The Contractor shall be paid an incentive of \$30,000.00 for each calendar day prior to May 1, 2012 that the Contractor achieves the completion of Milestone 1 as defined under this change order. This incentive payment shall not exceed \$300,000.00.
- 2) The Contractor shall be paid an incentive of \$30,000.00 for each calendar day prior to November 1, 2012 that the Contractor achieves the completion of Milestone 2 as defined under this change order. This incentive payment shall not exceed \$1,200,000.00.
- 3) The Contractor shall be paid an incentive of \$30,000.00 for each calendar day prior to December 31, 2012 that the Contractor achieves the completion of Milestone 3 as defined under this change order. This incentive payment shall not exceed \$300,000.00.

Any incentive payments achieved shall be compensated under a supplement to this change order.

Except for items of work specifically excluded herein, the lump sum compensation provided under this change order and Change Order No. 72 along with any incentive earned, as provided herein and under Change Order No. 72, constitutes full

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 72	Suppl. No. 1	Contract No. 04 - 0120S4	Road SF-80-12.7/13.2	FED. AID LOC.: NO FED AID
---------	--------------	--------------------------	----------------------	---------------------------

and complete compensation, including all markups, for all costs associated with the compression of the Contractor's schedule to achieve the milestones and any costs associated with the elimination of the Hinge K Closure and no additional compensation shall be paid.

Adjustment of Compensation at Lump Sum\$10,470,000.00

The following 5 work activities are excluded from this change order:

- 1) The Contractor shall provide formed block outs within the eastbound and westbound structures between Bents W3 and W2 to provide for the installation of tie downs for Hinge K. Plan details for the block outs along with compensation for the work shall be provided under a separate change order. The installation of the tie downs shall be performed by the adjacent contract (Contract 04-0120F4). No time extensions shall be granted for the milestone dates established under this change order for this work.
- 2) Any adjustment of compensation for eliminated electrical items due to the eliminated Hinge K Closure and concrete barrier items of work is deferred and shall be provided under a separate change order.
- 3) Anticipated changes to mitigate potential delays to the prestressing work at Frames 1 and 2 shall be addressed under a separate change order. No time adjustments will be made to the milestone dates established under this change order for this work.
- 4) All materials associated with the falsework left in place between Bents W3 and W2 as defined under Milestones 1 and 2 of this change order shall be paid at the cost to replace the falsework in kind including the application of a 15 percent markup.
- 5) Any adjustment of compensation for the eliminated work of stripping the falsework that is defined to be left in place under Milestone 1 and 2 is deferred and shall be provided under a separate change order.

It is hereby agreed that the Department shall provide a release of liability for the falsework left in place between Bents W3 and W2 as defined under Milestone 1 and 2 of this change order once the Contractor vacates the area as defined. This falsework shall become the property of the Department.

It is hereby agreed that the Department shall provide relief of maintenance and responsibility for each of the areas to be vacated as defined under Milestone 1, 2 and 3 of this change order. Relief shall be granted in accordance with Section 7-1.15 "Relief From Maintenance and responsibility" of the Contract Standard Specifications upon a request from the Contractor once each area is vacated as defined.

Estimated Cost: Increase ☒ Decrease ☐ \$9,448,480.00

By reason of this order the time of completion will be adjusted as follows: 0 days

Submitted by

Signature <i>William Howe</i>	Resident Engineer William Howe, Senior R.E.	Date 12-6-11
-------------------------------	--	-----------------

Approval Recommended by

Signature <i>Mike Fomer</i>	Construction Manager Mike Fomer	Date 12-7-11
-----------------------------	------------------------------------	-----------------

Engineer Approval by

Signature <i>Mike Fomer</i>	Construction Manager Mike Fomer	Date 12-14-11
-----------------------------	------------------------------------	------------------

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature <i>Edmund A. Pucki</i>	(Print name and title) Edmund A. Pucki, Treasurer	Date 12-13-11
----------------------------------	--	------------------

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 11/17/2011 Page 1 of 2

TO: Deanna Vilcheck, ACM / <i>MV</i>			FILE: E.A. 04 - 0120S4	
FROM: William Howe, Senior R.E.			CO-RTE-PM SF-80-12.7/13.2	
FED. NO. NO FED AID				
CCO#: 72	SUPPLEMENT#: 1	Category Code: BZZZ	CONTINGENCY BALANCE (incl. this change) \$72,478,078.80	
COST: \$9,448,480.00 INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
CCO DESCRIPTION: Establish Milestones & Eliminate Hinge K			PROJECT DESCRIPTION: YBITS-1 (Yerba Buena Island Transition Structures)	
Original Contract Time: 1390 Day(s)	Time Adj. This Change: 0 Day(s)	Previously Approved CCO Time Adjustments: 0 Day(s)	Percentage Time Adjusted: (including this change) 0 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 9

THIS CHANGE ORDER PROVIDES FOR:

The mitigation of all Department delays through November 1, 2011, the elimination of the Hinge K Closure construction and the establishment of milestones to release the Hinge K Closure area to the adjacent SAS contract.

This project, the Yerba Buena Island Transition Structure (YBITS), provides for the construction of two bridges which will connect eastbound and westbound traffic on the new east span of the San Francisco Oakland Bay Bridge (SFOBB) to the existing Yerba Buena Island (YBI) tunnel. The structures are comprised of concrete box girder bridges each approximately 26 meters wide, 40 meters high and 450 meters in length. Each structure is comprised of 2 frames, Frame 1 on the western portion of the structures and Frame 2 on the eastern portion.

The original Change Order No. 72 established a milestone to complete the prestressing of all frames on the structure by October 2012. This date corresponded with the anticipated turnover of the Hinge K Closure area from the adjacent SAS contract to this contract. This closure ties in the YBITS and SAS structures. Over the past 9 months, the Department has impacted the contractor's schedule due to access constraints with the SAS contract and added work associated with extensive modifications to the westbound structure required to accommodate the planned future construction of on and off ramps. Numerous other plan changes affecting the structures have also been issued. Together these changes have resulted in approximately 2 ½ months of delay to the work. This change order will act to mitigate all Department delays through November 1, 2012 by compensating the contractor to provide additional labor and equipment resources.

It was provided under this contract that after the Hinge K area is released by the SAS contract, the YBITS contract would construct the Hinge K Closure for both the westbound and eastbound structures. The SAS Risk Management team has now determined that significant risk would be mitigated by eliminating the Hinge K Closure construction from the YBITS contract and added it to the SAS contract. This transfer will eliminate the complex coordination that would be required for the YBITS contract to construct the closure while the SAS contract completes the load transfer on the SAS structure. This change order provides for the elimination of the Hinge K Closure from this contract.

In eliminating the Hinge K work from the contract, this change order provides 3 additional milestones. The first milestone will release the Hinge K area at the westbound structure by May 1, 2012, the second will release the eastbound structure Hinge K area by November 1, 2012, and the third will release a larger area of the project to the SAS contract by December 31, 2012. These releases will limit conflicts between the projects. The compensation being paid under this change order for providing additional labor and equipment resources will also allow the contractor to release these areas as specified under the 3 milestones established by this change order.

In order to mitigate past delays and achieve the milestones established under this change order, the contractor will need to compress their current schedule. This will be accomplished by providing addition labor crews to provide a 2nd work shift, working extended hours and mobilizing additional equipment onto the jobsite. The change order will provide compensation for the direct premium time labor and equipment rental costs of this work. Compensation will also provide for labor inefficiencies that are inherent to 2nd shift work, extended shift hours and an increased workforce.

Compensation for providing additional labor and equipment resources shall be paid as an adjustment of compensation at an agreed lump sum of \$10,470,000.00. The elimination of the Hinge K Closure work shall be credited to the Department by decreasing the appropriate contract items at contract prices for a total cost savings of \$1,021,520.00. The net change order cost of \$9,448,480.00 shall be financed from the contract contingency fund. The change order also provides incentives of \$30,000 per day for each day the contractor completes the 3 milestone prior to the dates specified. These incentives are

CONTRACT CHANGE ORDER MEMORANDUM

EA: 0120S4 CCO: 72 - 1

DATE: 11/17/2011 Page 2 of 2

capped at a maximum of \$1,800,000. Any incentive achieved shall be paid under a supplemental change order.

This Change Order is consistent with the Toll Bridge Program Oversight Committee's (TBPOC's) goal of achieving the seismic safety opening of the new SFOBB by 2013 and has been approved by the Committee at their December 1, 2011 meeting.

No adjustment of contract time is warranted as the change order acts to mitigate all Department delays to date. The change order will mitigate all Department delays incurred prior to November 1, 2011.

Maintenance concurrence is not required as this is an administrative change order and doesn't affect any permanent roadway features.

CONCURRED BY:			ESTIMATE OF COST		
Construction Engineer:	William Howe	Date 12-02-11	ITEMS	THIS REQUEST (\$1,021,520.00)	TOTAL TO DATE (\$1,021,520.00)
Bridge Engineer:	Mehran Ardakanian	Date	FORCE ACCOUNT	\$0.00	\$0.00
Project Engineer:	Bob Zandipour, Design	Date 12-9-11	AGREED PRICE	\$0.00	\$0.00
Project Manager:	Ken Terpstra	Date 12-20-11	ADJUSTMENT	\$10,470,000.00	\$22,651,065.00
FHWA Rep.:		Date	TOTAL	\$9,448,480.00	\$21,629,545.00
Environmental:		Date	FEDERAL PARTICIPATION		
Other (specify):		Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING		
Other (specify):		Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)		
District Prior Approval By:		Date	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
HQ (Issue Approve) By:	Larry Salhaney	Date 12-2-11	FEDERAL FUNDING SOURCE PERCENT		
Resident Engineer's Signature:	William Howe	Date 12-02-11			

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** July 10, 2012

FR: Dina Noel, Assistant Deputy Director Toll Bridge Program, CTC

RE: Agenda No. - 2b2

Item- Consent Calendar – Contract Change Orders (CCOs)
Yerba Buena Island Transition Structures (YBITS) No. 1
CCO 141 – Skyway and Oakland Touchdown (OTD) No. 1
Security Enhancements

Recommendation:

APPROVAL

Cost:

Not to Exceed \$1,300,000.00

Schedule Impacts:

N/A

Discussion:

YBITS1 Change Order No. 141 **in the not-to-exceed amount of \$1,300,000.00** will provide for the construction of security enhancement modifications to the existing Skyway and Oakland Touchdown 1 (OTD1) portions of the bridge. These enhancements were not part of the initial Skyway or OTD1 design. Work includes installing gates to prevent access at each of the 14 Pier Ladder locations and 4 substation staircases; installing 157 each “No Trespassing” signs at Pier, substation and service platform locations; installing locking chains at 31 service platform and substation staircases; installing a complete metal grating system to prevent access through the one-meter wide gap that extends the full width of the soffit at each of the 6 Skyway Hinges; and other security enhancements.

Risk Management:

Originally, the scope of this work was going to be added to the SAS contract, and as such it was accounted for on the SAS CCO log portion of the risk register, under CCO #199, for which \$1,500,000.00 were reserved.

Memorandum

Attachment(s):

1. Draft YBITS1 CCO 141-S0
2. Draft YBITS1 CCO 141-S0 Memo

DRAFT**CONTRACT CHANGE ORDER**

Change Requested by: Engineer

CCO 141	Suppl. No. 0	Contract No. 04 - 0120S4	Road SF-80-12.7/13.2	FED. AID LOC.: NO FED AID
---------	--------------	--------------------------	----------------------	---------------------------

To: M C M CONSTRUCTION INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Construct modifications to the Bay Bridge YBI Transition Structure - Skyway and Oakland Touchdown 1 (OTD1) Security Enhancements per attached drawings (Sheets 3 through 21 of this change order) as directed by the Engineer.

Extra Work at Force Account:

Perform required touch up painting, or any other additional work not already included in the scope for the agreed price as directed by the Engineer.

This work will be paid for as Extra Work as provided in Section 5-1.17, "Force Account Payment", of the Special Provisions and Section 4-1.03D, "Extra Work", of the Standard Specifications.

Estimated Cost of Extra Work at Force Account = \$100,000.00

Extra Work at Lump Sum:

Provide labor, equipment and materials to provide and install modifications as shown on the drawings and described hereir as follows:

1. Provide and install "No Trespassing" and "Danger High Voltage" signs per Sign Detail drawing (sheet 3 of 21) at each of the 29 existing platforms at Skyway and OTD1.
2. Provide and install security enhancements at each of the two (2) existing Skyway substations per drawing details (sheets 4 through 7).
3. Make guardrail improvements at three (3) existing OTD1 service platforms per drawing details (sheet 8).
4. Provide and install safety chains at each of the 29 existing platforms at Skyway and OTD1 (sheet 9).
5. Make platform improvements at each of the three (3) existing OTD1 service platforms per drawing details (sheet 9 details A and B).
6. Provide and install security gates at each of the two (2) existing Skyway substations (2 gates per substation) per drawing details (sheets 10 through 13).
7. Provide and install fender ladder covers at existing piers E2 (2 covers), E3 (4 covers), E4 (4 covers) and E5 (4 covers) per drawing details (sheet 14).
8. Provide and install "No Trespassing" signs at fender ladders and columns at existing piers E2 and E7 through E16 (116 total signs) per drawing details (sheet 15).
9. Provide and install stenciled "No Trespassing" signs at Skyway stairway access locations (30 total) per drawing details (sheet 16).
10. Provide and install "No Trespassing" signs and stenciled "No Trespassing" signs at each of the two (2) Skyway bikepath travelers (2 total signs plus 2 stencils) per drawing details (sheet 17).
11. Provide and install bird screen improvements at Skyway hinge locations (6 total) per drawing details (sheets 18 through 20).
12. Provide and install stenciled "No Trespassing" signs at OTD1 stairway access locations (3 total stencils) per drawing

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO 141	Suppl. No. 0	Contract No. 04 - 0120S4	Road SF-80-12.7/13.2	FED. AID LOC.: NO FED AID
---------	--------------	--------------------------	----------------------	---------------------------

details (sheet 21).

Extra Work at Agreed Lump Sum = \$1,200,000.00 (NOT TO EXCEED)

This price excludes the cost of any Stormwater Pollution Prevention (SWPP) measures, such as SWPPP amendments and reports, and appropriate Best Management Practices (BMPs), which will be paid for under a separate change order.

The Department will provide one (1) State lock and key set for each location where required. Locks are to be installed by the Contractor.

Estimated Cost: Increase ☒ Decrease ☐ \$1,300,000.00

By reason of this order the time of completion will be adjusted as follows: 0 days

Submitted by

Signature	Resident Engineer William Howe, Senior R.E.	Date
-----------	--	------

Approval Recommended by

Signature	Principal T.E. Mike Forner	Date
-----------	-------------------------------	------

Engineer Approval by

Signature	Principal T.E. Mike Forner	Date
-----------	-------------------------------	------

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date
-----------	------------------------	------

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
CONTRACT CHANGE ORDER MEMORANDUM

DRAFT

DATE: 6/6/2012 Page 1 of 2

TO: Deanna Vilcheck, ACM /			FILE: E.A. 04 - 0120S4	
FROM: William Howe, Senior R.E.			CO-RTE-PM SF-80-12.7/13.2	
			FED. NO. NO FED AID	
CCO#: 141	SUPPLEMENT#: 0	Category Code: CXXX	CONTINGENCY BALANCE (incl. this change) \$61,746,388.00	
COST: \$1,300,000.00 INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
CCO DESCRIPTION: Skyway & Oakland Touchdown 1 Security			PROJECT DESCRIPTION: YBITS-1 (Yerba Buena Island Transition Structures)	
Original Contract Time: 1390 Day(s)	Time Adj. This Change: 0 Day(s)	Previously Approved CCO Time Adjustments: 0 Day(s)	Percentage Time Adjusted: (including this change) 0 %	Total # of Unreconciled-Deferred-Time CCO(s): (including this change) 9

THIS CHANGE ORDER PROVIDES FOR:

This change order provides funds to compensate the Contractor for fabrication and installation of security enhancements for each of the Skyway and Oakland Touchdown 1 (OTD1) service platforms, electrical substations, piers and hinge gaps.

Previously, the Bay Bridge Eastspan Skyway (Contract 04-012024, completed in 2008) and OTD1 (Contract 04-0120L4, completed in 2010) were constructed. The Skyway consists of two parallel 2.1 km long superstructures (eastbound and westbound), made up of precast segmental concrete box girders supported by 28 piers; and OTD1 consists of a pair of cast-in-place box girders (approximately 1.2 km long) that connect to the Skyway structures.

The Engineer has determined that the design should incorporate security enhancements that had not been previously considered for the Skyway and OTD1.

At 27 of the piers, there are service platforms that cantilever out from the superstructure to hold electrical equipment; there are two (2) electrical substations that are accessed through stairways on the exterior of the superstructure; there are numerous boat access points that include ladders to the piers; and there are six (6) expansion joints (hinges) that have a one (1) meter wide gap completely across the soffit of the superstructure. The Engineer's design includes security enhancements, such as installing steel security access gates at each of the 14 pier ladder locations and each of the four (4) substation staircases; installing 159 each "No Trespassing" signs at pier, substation traveler, and service platform locations; installing locking chain systems at 31 service platform and substation staircases; installing a complete metal grating system to prevent access through the one (1) meter wide gap that extends the full width of the soffit at each of the six (6) Skyway hinges; and other security enhancements.

This CCO provides funding for an Agreed Lump Sum of \$1,200,000.00 (NOT TO EXCEED), plus there will be an additional \$100,000.00 in force account funds for completing paint touchup and other work. The force account work will be paid for on an actual cost basis as provided in Section 5-1.17, "Force Account Payment", of the Special Provisions, and Section 4-1.03D, Extra Work, of the Standard Specifications. The total CCO cost is \$1,300,000.00 (NOT TO EXCEED). This will be funded from the project's contingency fund. A cost analysis is on file.

No adjustment of contract time is warranted, as this change will not affect the controlling operation.

This change order was requested by Bob Zandipour, Senior Transportation Engineer, Toll Bridge Design.

Maintenance concurrence will be obtained from Lina Ellis, HQ Maintenance.

CONTRACT CHANGE ORDER MEMORANDUM

CONCURRED BY:			ESTIMATE OF COST										
Construction Engineer:	William Howe	Date	ITEMS	THIS REQUEST	TOTAL TO DATE								
Bridge Engineer:	Mehran Ardakanian	Date	FORCE ACCOUNT	\$0.00	\$0.00								
Project Engineer:	Bob Zandipour, Design	Date	AGREED PRICE	\$100,000.00	\$100,000.00								
Project Manager:	Ken Terpstra	Date	ADJUSTMENT	\$1,200,000.00	\$1,200,000.00								
FHWA Rep.:		Date	TOTAL	\$0.00	\$0.00								
Environmental:		Date		\$1,300,000.00	\$1,300,000.00								
Other (specify):	Lina Ellis, Str. Maintenance	Date	FEDERAL PARTICIPATION										
Other (specify):		Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING										
District Prior Approval By:		Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type) <input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS										
HQ (Issue Approve) By:		Date	<table border="0"> <tr> <td>FEDERAL FUNDING SOURCE</td> <td>PERCENT</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> </table>			FEDERAL FUNDING SOURCE	PERCENT	_____	_____	_____	_____	_____	_____
FEDERAL FUNDING SOURCE	PERCENT												
_____	_____												
_____	_____												
_____	_____												
Resident Engineer's Signature:		Date											

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** July 10, 2012

FR: Dina Noel, Assistant Deputy Director Toll Bridge Program, CTC

RE: Agenda No. - 2b3

Item- Consent Calendar – Contract Change Orders (CCOs)
Yerba Buena Island Transition Structures (YBITS) No. 1
CCO 905-S0 – Design and Install SCADA Remote Monitoring &
Control System

Recommendation:

APPROVAL

Cost:

\$1,512,098.00

Schedule Impacts:

N/A

Discussion:

CCO 905-S0 in the amount \$1,512,098.00 will provide for a survey of the existing hardware and the subsequent software development, installation, and testing of the supervisory control and data acquisition (SCADA) system for the new SFOBB east span. It will also integrate the existing SCADA system of the SFOBB west span with the new system, and will provide for the graphic design, development, and installation of custom graphic monitoring screens and a control and monitoring system within the administration building at the SFOBB toll plaza, allowing the entire SCADA system to be monitored and controlled from a localized workstation.

The SCADA system will allow for the remote monitoring and control of the hardware that is being installed on the various SFOBB contracts including roadway lighting systems, electrical substations, fog detection systems, navigational and aviation systems, dehumidifiers, wind meters, and call boxes and will include control nodes and modes of operations for normal and abnormal system conditions along with failure notifications.

Risk Management:

The cost of this work falls within the budgeted amount estimated as part of the \$30,740,000.00 in additional funding provided to the YBITS1 for the cost of the MEP integration work.

Memorandum

Attachment(s):

1. Draft CCO 905-S0
2. Draft CCO Memo 905-S0
3. MEP Integration Strategy

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO 905	Suppl. No. 0	Contract No. 04 - 0120S4	Road SF-80-12.7/13.2	FED. AID LOC.: NO FED AID
---------	--------------	--------------------------	----------------------	---------------------------

To: M C M CONSTRUCTION INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Extra Work at Force Account:

Perform miscellaneous corrective work on existing facilities due to unforeseen field conditions as required to perform the work of this change order as determined necessary by the Engineer.

Labor, equipment and material authorized by the Engineer, as necessary, will be paid in accordance with the provisions of Section 4-1.03D, "Extra Work", of the Standard Specifications and Section 5-1.24, "Force Account Payment", of the Special Provisions.

Estimated Cost of Extra Work at Force Account = \$300,000.00

Extra Work at Lump Sum:

Furnish and install all components of the SCADA System for the San Francisco Oakland Bay Bridge (East Span) as specified on Pages 2 through 39 of this change order and as shown on Pages 40 through 194 (Plan Sheets E-1300 through E-1450) of this change order.

For this work, the Contractor shall be compensated an Agreed Lump Sum of \$1,212,098.00, which constitutes full compensation, including all markups, complete in place for this change.

Extra Work at Agreed Lump Sum = \$1,212,098.00

Estimated Cost: Increase ☒ Decrease ☐ **\$1,512,098.00**

By reason of this order the time of completion will be adjusted as follows: 0 days

Submitted by

Signature	Resident Engineer William Howe, Senior R.E.	Date
-----------	--	------

Approval Recommended by

Signature	Principal T.E. Mike Forner	Date
-----------	-------------------------------	------

Engineer Approval by

Signature	Principal T.E. Mike Forner	Date
-----------	-------------------------------	------

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date
-----------	------------------------	------

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 6/5/2012

Page 1 of 2

TO: Deanna Vilcheck, ACM /			FILE: E.A. 04 - 0120S4	
FROM: William Howe, Senior R.E.			CO-RTE-PM SF-80-12.7/13.2	
FED. NO. NO FED AID				
CCO#: 905	SUPPLEMENT#: 0	Category Code: CBPC	CONTINGENCY BALANCE (incl. this change) \$66,248,866.00	
COST: \$1,512,098.00 INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
CCO DESCRIPTION: SCADA Integration			PROJECT DESCRIPTION: YBITS-1 (Yerba Buena Island Transition Structures)	
Original Contract Time: 1390 Day(s)	Time Adj. This Change: 0 Day(s)	Previously Approved CCO Time Adjustments: 0 Day(s)	Percentage Time Adjusted: (including this change) 0 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 9

THIS CHANGE ORDER PROVIDES FOR:

The survey and verification of the existing electrical hardware systems and equipment parameters, software development and furnishing, installation and testing integration and monitoring equipment concerning the supervisory control and data acquisition system (SCADA) for the new SFOBB east span.

The new east span of the San Francisco Oakland Bay Bridge (SFOBB) is comprised of 4 main structures, the Yerba Buena Island Transition Structure (YBITS), the Self-Anchored Suspension (SAS) structure, the Skyway structure and the Oakland Touchdown (OTD) structure. The Skyway and a large component of the OTD were constructed several years ago under separate contracts.

In November of 2008, the Toll Bridge Program Oversight Committee (TBPOC) approved the SFOBB Mechanical, Electrical and Piping (MEP) integration strategy, which provided for the MEP work eliminated from the Skyway and OTD contracts to be performed under the SAS and YBITS contracts. The work being performed under this change order constitutes part of this MEP implementation strategy.

Through the numerous SFOBB east span contracts, various electrical hardware components have been furnished and installed concerning roadway lighting systems, electrical substations, traffic operations systems, fog detection systems, navigational and aviation systems, dehumidifiers, wind meters and call boxes. This change order will provide for the design and installation of the software, which will allow for the remote monitoring and control of the hardware systems installed. The existing SFOBB west span SCADA system will also be integrated to interface with the new east span system.

In addition to the software development, installation and integration, this change will provide for the graphic design, development and installation of custom graphic monitoring screens within the administration building at the SFOBB Toll Plaza. A control and monitoring system will be installed with these screens that will allow for the entire SCADA system to be monitored and controlled from a workstation within the administrative building. The system will include control nodes and modes of operations for normal system conditions and abnormal system operations along with notifications of failures within the entire system.

The work of this change will be compensated as Extra Work at an Agreed Lump Sum of \$1,212,098.00. Any necessary corrective work required on the existing hardware components shall be paid as Extra Work at Force Account at an estimated cost of \$300,000.00. The total estimated change order cost of \$1,512,098.00 shall be financed from the contract's contingency funds. A cost estimate is on file.

Additional funding of \$30,740,000 has previously been provided to this contract's contingency funds to provide for the costs of the anticipated MEP integration work to be performed under this contract. The cost of this change falls within the costs budgeted under the funding provided.

No adjustment of contract time is required as the work will not affect the controlling operation.

Maintenance concurrence will be obtained from Line Ellis, Structures Maintenance.

CONTRACT CHANGE ORDER MEMORANDUM

EA: 0120S4 CCO: 905 - 0

DATE: 6/5/2012

Page 2 of 2

CONCURRED BY:			ESTIMATE OF COST										
Construction Engineer:	William Howe	Date	ITEMS	THIS REQUEST	TOTAL TO DATE								
Bridge Engineer:	Mehran Ardakanian	Date	FORCE ACCOUNT	\$0.00	\$0.00								
Project Engineer:	Bob Zandipour, Design	Date	AGREED PRICE	\$300,000.00	\$300,000.00								
Project Manager:	Ken Terpstra	Date	ADJUSTMENT	\$1,212,098.00	\$1,212,098.00								
FHWA Rep.:		Date	TOTAL	\$0.00	\$0.00								
Environmental:		Date		\$1,512,098.00	\$1,512,098.00								
Other (specify):	Lina Ellis, Str. Maintenance	Date	FEDERAL PARTICIPATION										
Other (specify):		Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING										
District Prior Approval By:		Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)										
HQ (Issue Approve) By:		Date	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS										
Resident Engineer's Signature:		Date	<table border="0"> <tr> <td>FEDERAL FUNDING SOURCE</td> <td>PERCENT</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> </table>			FEDERAL FUNDING SOURCE	PERCENT	_____	_____	_____	_____	_____	_____
FEDERAL FUNDING SOURCE	PERCENT												
_____	_____												
_____	_____												
_____	_____												

SFOBB MEP Integration Strategy (CONFIDENTIAL)

7-10-2012

	Segregation of Work	Nov 2008 Estimated Cost	January 2012 Estimated Cost	July 2012 Estimated Cost	Executed Contracts / CCOs to Date	Comments
A	Furnish Light Poles (BATA Contract)					
ITEM 1A	Furnish Light Poles	\$15,300,000.00	\$5,888,909.00	\$5,888,909.00	\$2,888,909.00	The fixtures were eliminated from this contract and added to Item 1B below.
ITEM 2A	Storage Cost	\$1,500,000.00	\$200,000.00	\$200,000.00		
	Contingency (Included in the above)					
	Total Estimated Cost To Furnish Light Poles (BATA Contract)	\$16,800,000.00	\$6,088,909.00	\$6,088,909.00	\$2,888,909.00	
B	MEP Integration Work Installation					
ITEM 1B	Install Light Poles (Skyway and OTD1), F&I LED fixture for corridor poles	\$2,000,000.00	\$13,500,000.00	\$13,500,000.00	\$13,466,929.00	Fixtures were eliminated from pole contract and added to this item.
ITEM 2B	Installation of MEP items eliminated from Skyway & OTD1	\$8,000,000.00	\$8,000,000.00	\$8,000,000.00	\$5,250,000.00	CCO 110 approx. \$5M & CCO 907 Approx. \$250K
ITEM 3B	Upgrades & Revisions of the already installed components (Skyway & OTD1)	\$2,500,000.00	\$2,500,000.00	\$2,500,000.00	\$1,600,000.00	CCO 163
ITEM 4B	Installation of BASE System (conduits & Cabinets within Skyway & OTD1)	\$2,000,000.00	\$0.00	\$0.00		This work is included in Item D below
ITEM 5B	Contingency (20%), changed to 15% in January 2012	\$2,900,000.00	\$3,600,000.00	\$3,600,000.00		
	Total Estimated Cost For Installation	\$17,400,000.00	\$27,600,000.00	\$27,600,000.00	\$20,316,929.00	
Total for all Light Poles & MEP Integration Work (within Skyway & OTD1)		\$34,200,000.00	\$33,688,909.00	\$33,688,909.00	\$23,205,838.00	Total of \$34.2M for Items A & B was approved by TBPOC 11-6-2008
C	System Wide Testing (Entire Corridor)					
ITEM 1C	System wide (Entire Corridor) testing, Relay Setting, SCADA development & commissioning	\$3,000,000.00	\$3,000,000.00	\$3,000,000.00	\$1,500,000.00	CCO 905 for \$1.5M
ITEM 2C	Resolution of system wide testing issues (for entire corridor)	\$1,500,000.00	\$1,500,000.00	\$1,500,000.00		
ITEM 3C	Contingency (20%)	\$900,000.00	\$900,000.00	\$900,000.00		
	Total Estimated Cost Of System wide Testing	\$5,400,000.00	\$5,400,000.00	\$5,400,000.00		\$5.4M (TBPOC May 6, 2010)
D	Complete BASE System (Entire Corridor)	March 2010	Jan 2012	July 2012		
ITEM 1D	Hardware (about 150 cameras, interface box and decoder for each camera / wiring)	\$3,000,000.00	\$3,000,000.00	TBD		
ITEM 2D	Installation cost (Camera & Hardware)	\$1,500,000.00	\$1,500,000.00	TBD		
ITEM 3D	New dedicated fiber line in both structures with 2 loops	\$2,000,000.00	\$2,000,000.00	TBD	\$2,400,000.00	CCO's 901, 901S1 & 904 on YBI and 150 on SAS
ITEM 4D	Network & Video Management & Monitoring			TBD		
ITEM 4D	Contingency (20%)	\$1,300,000.00	\$1,300,000.00	TBD		
	Total Estimated Cost for BASE System	\$7,800,000.00	\$7,800,000.00	\$0.00	\$2,400,000.00	Need to transfer funds from rehab for this work
	Total for all above items (Including BATA Contract)	\$47,400,000.00	\$46,888,909.00	\$39,088,909.00	\$25,605,838.00	
	Items for approval					
	Items with increased cost estimate (this period)					

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** July 3, 2012

FR: Andrew Fremier, Deputy Director, BATA

RE: Agenda No. - 3a
Progress Reports
Item- Project Progress and Financial Update June 2012

Recommendation:
APPROVAL

Cost:
N/A

Schedule Impacts:
N/A

Discussion:
Included in this package is a draft Project Progress and Financial Update June 2012. By meeting time, the PMT would have approved the report under a delegated TBPOC authority. TBPOC confirmation of this approval is requested.

Attachment(s):
Project Progress and Financial Update June 2012 (see end of binder)

San Francisco Bay Area Toll Bridge Seismic Retrofit and Regional Measure 1 Programs

**Project Progress
and Financial Update**
June 2012



**TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE**

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Released: July 2012



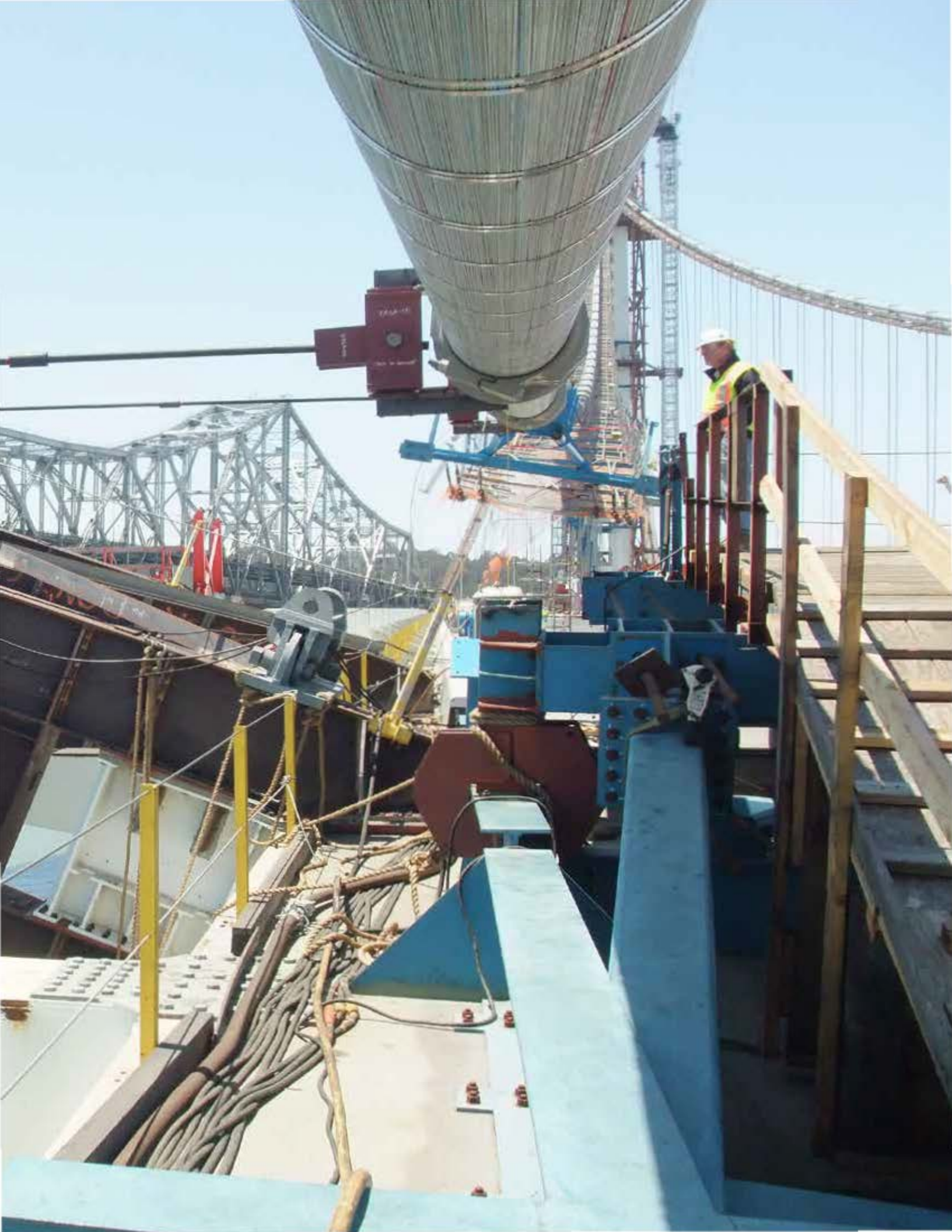
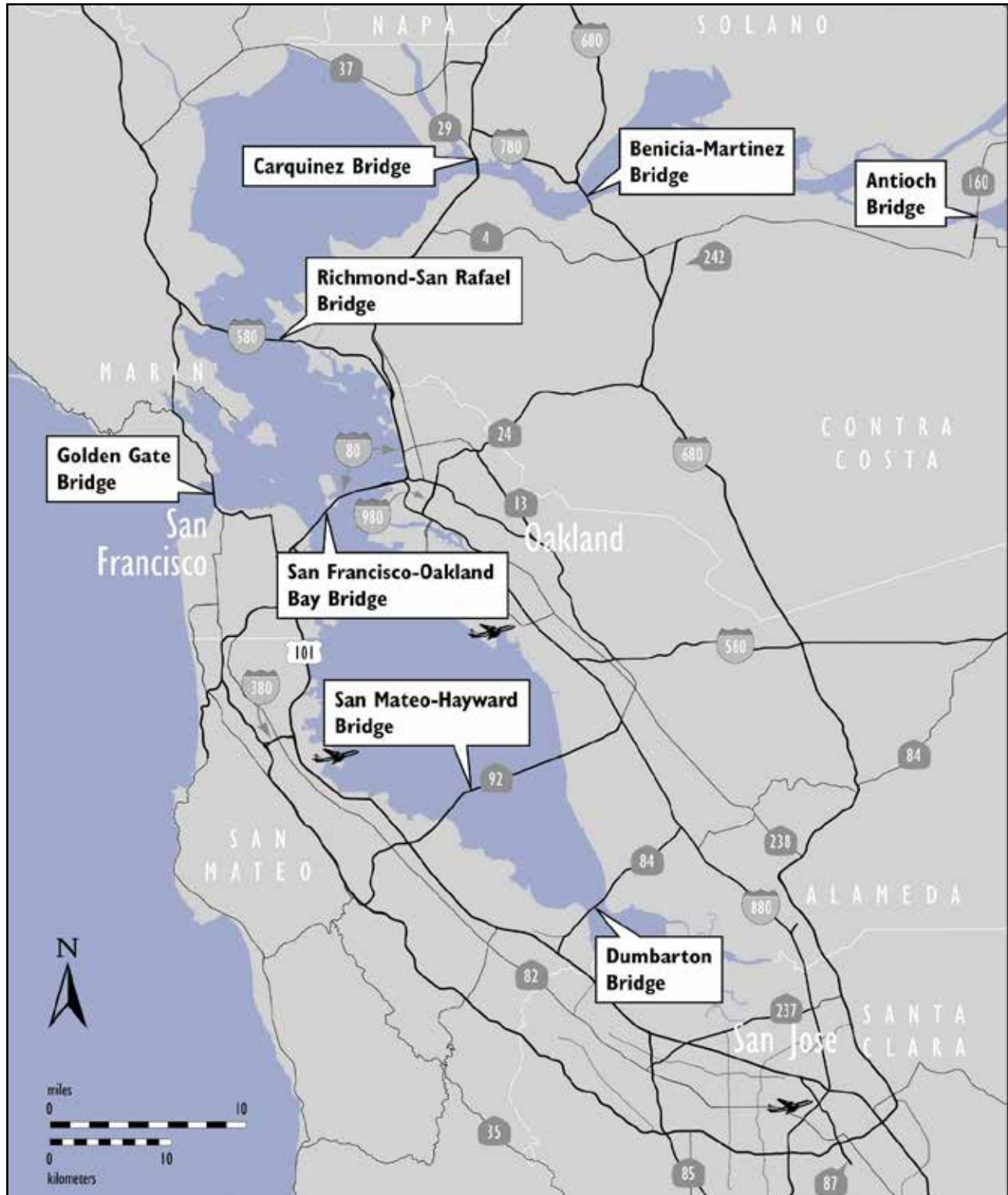




Table of Contents

Introduction	1
Summary Of Major Project Highlights, Issues, And Actions	2
Toll Bridge Seismic Retrofit Program Cost Summary	6
Toll Bridge Seismic Retrofit Program Schedule Summary	7
Regional Measure 1 Program Cost Summary	8
Regional Measure 1 Program Schedule Summary	9
Toll Bridge Seismic Retrofit Program (TBSRP)	11
San Francisco-Oakland Bay Bridge Seismic Retrofit Strategy	12
East Span Seismic Replacement Project	13
San Francisco-Oakland Bay Bridge East Span Replacement Project Summary	14
Yerba Buena Island Detour (YBID)	15
Yerba Buena Island Transition Structures	16
Self-Anchored Suspension (SAS) Bridge	18
SAS Construction Sequence	20
SAS Superstructure Fabrication Activities	22
Skyway	24
Existing East Span Demolition	27
Other Contracts	28
Antioch Bridge Seismic Retrofit Project	30
Dumbarton Bridge Seismic Retrofit Project	32
Other Completed TBSRP Projects	34
Regional Measure 1 Toll Bridge Program	37
Other Completed RM1 Projects	38

Map of Bay Area Toll Bridges



* The Golden Gate Bridge is owned and operated by the Golden Gate Bridge, Highway and Transportation District.

Introduction

In July 2005, Assembly Bill (AB) 144 (Hancock) created the Toll Bridge Program Oversight Committee (TBPOC) to implement a project oversight and project control process for the new Benicia-Martinez Bridge and State Toll Bridge Seismic Retrofit Program projects. The TBPOC consists of the Director of the California Department of Transportation (Caltrans), the Executive Director of the Bay Area Toll Authority (BATA) and the Executive Director of the California Transportation Commission (CTC). The TBPOC's project oversight and control processes include, but are not limited to, reviewing bid specifications and documents, reviewing and approving significant change orders and claims in excess of \$1 million (as defined by the Committee), and keeping the Legislature and others apprised of current project progress and status. In January 2010, Assembly Bill (AB) 1175 (Torlakson) amended the TBSRP to include the Antioch and Dumbarton Bridges seismic retrofit projects. The current Toll Bridge Seismic Retrofit Program is as follows:

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
Dumbarton Bridge Seismic Retrofit	Construction
Antioch Bridge Seismic Retrofit	Complete
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Complete
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
1958 Carquinez Bridge Seismic Retrofit	Complete

The New Benicia-Martinez Bridge is part of a larger program of toll-funded projects called the Regional Measure 1 (RM1) Toll Bridge Program under the responsibility of BATA and Caltrans. While the rest of the projects in the RM1 program are not directly under the responsibility of the TBPOC, BATA and Caltrans will continue to report on their progress as an informational item. The RM1 program includes:

Regional Measure 1 Projects	Open to Traffic Status
Interstate 880/State Route 92 Interchange Reconstruction	Open
1962 Benicia-Martinez Bridge Reconstruction	Open
New Benicia-Martinez Bridge	Open
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Open
Richmond-San Rafael Bridge Trestle, Fender & Deck Joint Rehabilitation	Open
Westbound Carquinez Bridge Replacement	Open
San Mateo-Hayward Bridge Widening	Open
State Route 84 Bayfront Expressway Widening	Open
Richmond Parkway	Open

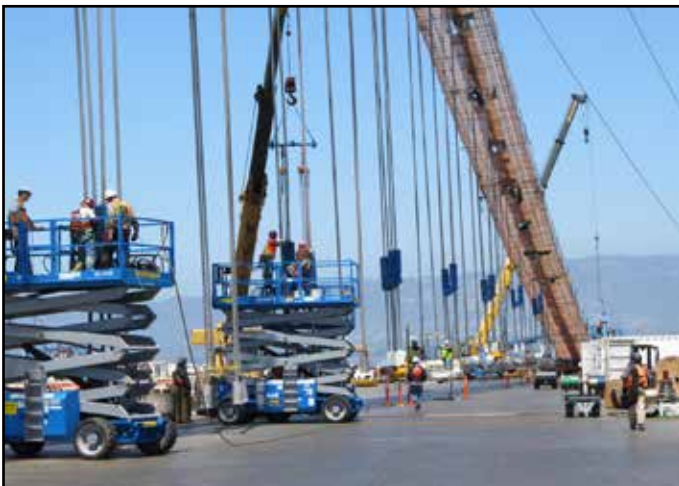
SUMMARY OF MAJOR PROJECT HIGHLIGHTS, ISSUES, AND ACTIONS



The Parallel Wire Strand (PWS) Cable Swing-Out Framing Being Erected on the West Bound Roadway Box



Light Poles Installed on the Skyway



Friction Clamps Being Installed on the Suspenders on the Self-Anchored Suspension Bridge

Toll Bridge Seismic Retrofit Program Risk Management

A major element of the 2005 AB 144, the law creating the TBPOC, was legislative direction to implement a more aggressive risk management program. Such a program has been implemented in stages over time to ensure development of a robust and comprehensive approach to risk management.

A comprehensive risk assessment is performed for each project in the program on a quarterly basis. Based upon those assessments, a forecast is developed using the average cost of risk. These forecasts can both increase and decrease as risks are identified, resolved or retired. Nonetheless, assurances have been made that the public is informed of the risks that have been identified and the possible expense they could necessitate.

The program contingency is currently \$284 million in accordance with the TBPOC Approved Budget. As of the end of the first quarter of 2012, the 50 percent probable draw on program contingency is \$154 million. The potential draw ranges from about \$75 million to \$225 million.

The \$154 million program contingency balance can be used to cover the costs of identified risks. In accordance with the approved TBSRP Risk Management Plan, risk mitigation actions are continuously developed and implemented to reduce the potential draw on the program contingency.

San Francisco-Oakland Bay Bridge (SFOBB) East Span Seismic Replacement Project SAS Superstructures Contract

The prime contractor constructing the Self-Anchored Suspension (SAS) bridge from the completed Skyway to Yerba Buena Island is a joint venture of American Bridge/Fluor (ABF). The structures that comprise the SAS were produced both in the Bay Area and around the world.

With installation of all structural elements of the tower and roadway nearing completion, focus is now turning to the placement of the bridge's more than 2.5 - foot in diameter and nearly mile-long main cable. The single cable is made up of 137 separate bundled strands containing 127 individual pencil thin wires (see diagram on page 22). Each of the 137 bundled strands are individually pulled by a tramway system

similar to a ski lift, to haul the strands up and around the bridge. Cable strand installation started in December 2011 and was completed in April 2012. The cable was compacted to minimize voids in May 2012. Installation of suspender brackets and suspenders is now underway. The TBPOC's goal is to open the bridge to traffic in both directions by September 2013.

Yerba Buena Island Transition Structure #1 Contract

The YBITS #1 contract was awarded to MCM Construction, Inc., the same contractor that completed the Oakland Touchdown (OTD) #1 contract. The MCM contract includes completing the remaining foundations and the bridge deck structure from the Yerba Buena Island Tunnel to the Self-Anchored Suspension (SAS) bridge's Hinge "K" closure gap (Hinge "K" closure is now part of the SAS contract).

Work on the westbound structure was completed in February 2012. Work is now focusing on the eastbound structure from the lower tunnel deck to the SAS bridge.

Yerba Buena Island Transition Structure #2 Contract

The YBITS #2 contract was advertised on April 9, 2012 and bid opening is forecast for September 25, 2012.

Oakland Touchdown #2 Contract

The OTD #2 contract for construction was advertised in November 2011. Bid opening was held on March 21, 2012, and the contract was awarded to Flatiron West, Inc. on March 29, 2012. The first working day will be on June 25, 2012.



Yerba Buena Island Transition Structure #1 Eastbound Frame #2 Formwork



Yerba Buena Island Transition Structure #1 Westbound Deck Complete and Eastbound in Progress with Existing Bridge on Left

SUMMARY OF MAJOR PROJECT HIGHLIGHTS, ISSUES, AND ACTIONS



Oakland Detour - Westbound Opened to Traffic



Existing San Francisco-Oakland Bay Bridge Cantilever Section to be Dismantled



Antioch Bridge Seismic Retrofit

Existing SFOBB Dismantling

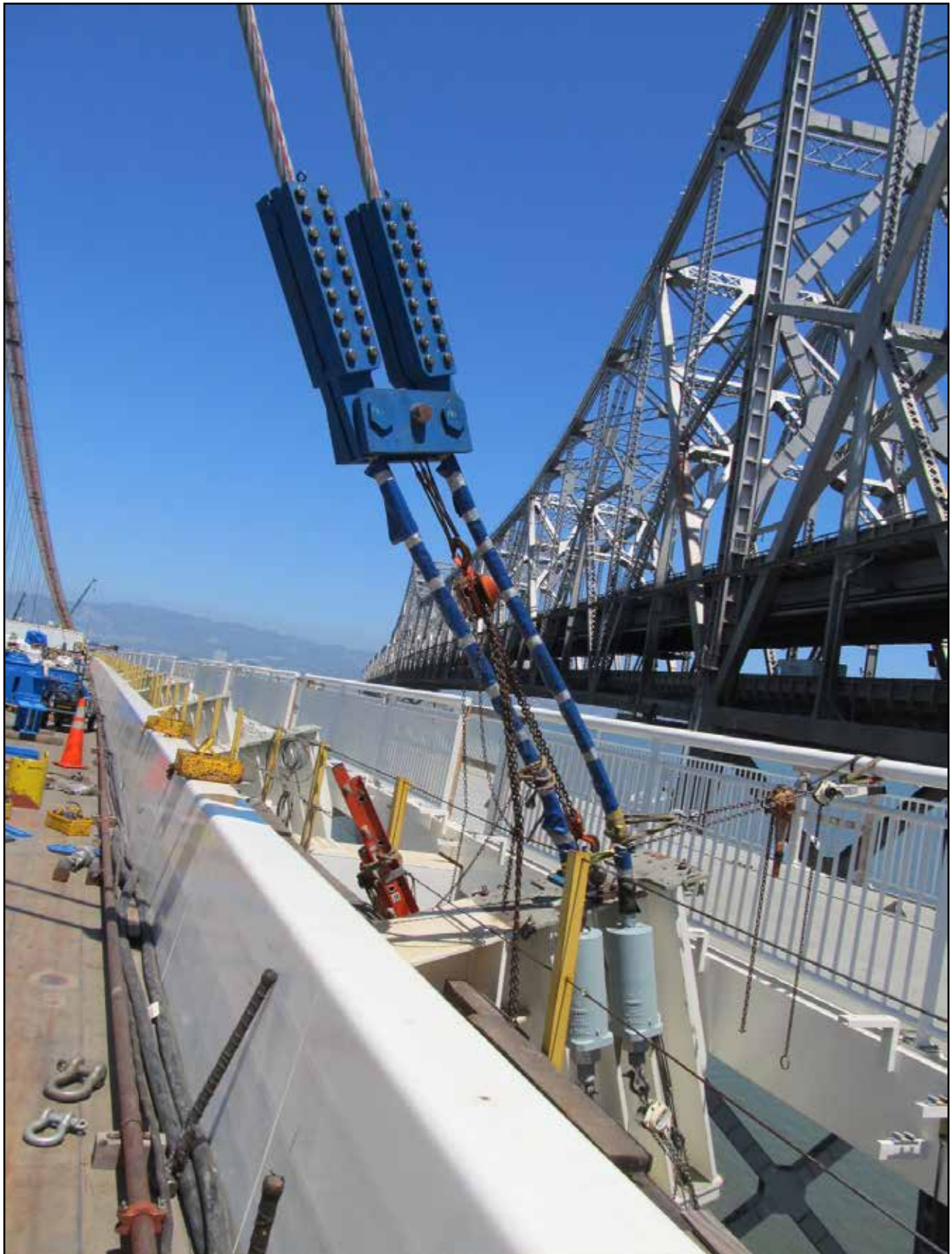
To expedite the opening of a new eastbound on-ramp and the pedestrian/bicycle pathway from Yerba Buena Island, the TBPOC has decided to split the bridge dismantling project into at least two contracts. The dismantling of the superstructure of the main cantilever section of the existing bridge will be incorporated into the YBITS #2 contract, while the remaining portions of the existing bridge will be removed by separate contract(s) still in design.

Antioch Bridge Seismic Retrofit

The major retrofit strategy for the bridge includes installing seismic isolation bearings at each of the 41 piers, strengthening piers 12 through 31 with steel cross-bracing between column bents, and installing steel casings at all columns located at the Sherman Island approach slab bridge. Seismic safety opening was achieved on April 12, 2012 and contract completion is forecast for July 2012. Project Progress is reported on page 30.

Dumbarton Bridge Seismic Retrofit

The Dumbarton bridge Bridge is a combination of three bridge types; reinforced concrete slab approaches supported on multiple pile extension columns, precast - prestressed concrete girders and steel box girders supported on reinforced concrete piers. The retrofit strategy for the bridge includes superstructure and deck modifications and installation of isolation bearings. The Dumbarton Bridge was closed for construction over the 2012 Memorial Day weekend to install a seismic joint at the west end of the bridge. The bridge will be closed again over the Labor Day 2012 weekend to install a seismic joint at the east end of the bridge. Project progress is reported on page 32.



The Self-Anchored Suspension Bridge Suspenders Installed in the Suspender Brackets

Toll Bridge Seismic Retrofit Program Cost Summary (Millions)

	Contract Status	AB 144/SB 66 Budget (August 2005)	TBPOC Approved Changes	Current TBPOC Approved Budget (May 2012)	Cost to Date (May 2012)	Current Cost Forecast (May 2012)	Cost Variance	Cost Status
		a	b	c = a + b	d	e	f = e - c	
SFOBB East Span Seismic Replacement								
Capital Outlay Construction								
Skyway	Completed	1,293.0	(47.8)	1,245.2	1,237.2	1,245.2	-	●
SAS Marine Foundations	Completed	313.5	(34.9)	278.6	274.8	278.6	-	●
SAS Superstructure	Construction	1,753.7	293.1	2,046.8	1,675.5	2,058.0	11.2	●
YBI Detour	Completed	131.9	360.9	492.8	466.1	482.8	(10.0)	●
YBI Transition Structures (YBITS)		299.3	(37.3)	262.0	130.2	326.7	64.7	●
YBITS 1	Construction			199.7	130.2	243.6	43.9	●
YBITS 2	Advertised			59.0	-	79.8	20.8	●
YBITS Landscaping	Design			3.3	-	3.3	-	●
Oakland Touchdown (OTD)		283.8	50.8	334.6	208.7	327.3	(7.3)	●
OTD 1	Completed			212.0	203.0	203.3	(8.7)	●
OTD 2	Construction			62.0	-	56.3	(5.7)	●
Detour	Completed			51.0	-	53.7	2.7	●
OTD Electrical Systems	Design			-	-	4.4	4.4	●
Submerged Electric Cable	Completed			9.6	5.7	9.6	-	●
Existing Bridge Demolition	Design	239.2	(0.1)	239.1	-	237.3	(1.8)	●
*Cantilever Section	Advertised			-	-	60.4		
*504/288 Sections	Design			-	-	176.9		
Stormwater Treatment Measures	Completed	15.0	3.3	18.3	16.9	18.3	-	●
Other Completed Contracts	Completed	90.4	-	90.4	89.9	90.4	-	●
Capital Outlay Support		959.3	261.5	1,220.8	1,059.2	1,264.1	43.3	●
Right-of-Way and Environmental Mitigation		72.4	-	72.4	51.7	80.4	8.0	●
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)	●
Total SFOBB East Span Replacement		5,486.6	846.2	6,332.8	5,210.9	6,416.8	84.0	
Antioch Bridge Seismic Retrofit								
Capital Outlay Construction and Mitigation	Construction		51.0	51.0	44.4	50.8	(0.2)	●
Capital Outlay Support			31.0	31.0	22.7	31.0	-	●
Total Antioch Bridge Seismic Retrofit		-	82.0	82.0	67.1	81.8	(0.2)	
Dumbarton Bridge Seismic Retrofit								
Capital Outlay Construction and Mitigation	Construction		92.7	92.7	44.5	83.5	(9.2)	●
Capital Outlay Support			56.0	56.0	34.3	56.0	-	●
Total Dumbarton Bridge Seismic Retrofit		-	148.7	148.7	78.8	139.5	(9.2)	
Other Program Projects		2,268.4	(63.6)	2,204.8	2,163.0	2,192.2	(12.6)	●
Miscellaneous Program Costs		30.0	-	30.0	25.5	30.0	-	●
Net Programmatic Risks		-	-	-	-	92.0	92.0	●
Program Contingency		900.0	(616.3)	283.7	-	129.7	(154.0)	●
Total Toll Bridge Seismic Retrofit Program²		8,685.0	397.0	9,082.0	7,545.3	9,082.0	-	

Toll Bridge Seismic Retrofit Program Schedule Summary (Millions)

	AB 144/SB 66 Project Completion Schedule Baseline (July 2005)	TBPOC Approved Changes (Months)	Current TBPOC Approved Completion Schedule (May 2012)	Current Completion Forecast (May 2012)	Schedule Variance (Months)	Schedule Status	Remarks/ Notes
	g	h	i = g + h	j	k = j - i	l	
SFOBB East Span Seismic Replacement							
Contract Completion							
Skyway	Apr 2007	8	Dec 2007	Dec 2007	-	●	See Page 24
SAS Marine Foundations	Jun 2008	(5)	Jan 2008	Jan 2008	-	●	See Page 18
SAS Superstructure	Mar 2012	29	Aug 2014	Aug 2014	-	●	See Page 19
YBI Detour	Jul 2007	39	Oct 2010	Oct 2010	-	●	See Page 15
YBI Transition Structures (YBITS)	Nov 2013	27	Feb 2016	Feb 2016	-	●	See Page 16
YBITS 1			Dec 2013	Dec 2013	-	●	
YBITS 2			Feb 2016	Feb 2016	-	●	
Oakland Touchdown	Nov 2013	10	Sep 2014	Sep 2014	-	●	See Page 26
OTD 1			Jun 2010	Jun 2010	-	●	
OTD 2			Sep 2014	Sep 2014	-	●	
Submerged Electric Cable			Jan 2008	Jan 2008	-	●	
Existing Bridge Demolition	Sep 2014	18	Dec 2015	June 2017	18	●	
Stormwater Treatment Measures	Mar 2008		Mar 2008	Mar 2008	-	●	
SFOBB East Span Bridge Opening and Other Milestones							
Westbound Seismic Safety Open	Sep 2011	27	Dec 2013	Sep 2013	(3)	●	
Eastbound Seismic Safety Open	Sep 2012	15	Dec 2013	Sep 2013	(3)	●	
Bike/Ped Pathway Open to YBI			Sep 2015	Sep 2015	-	●	
Permanent Eastbound On Ramp Open			Sep 2015	Sep 2015	-	●	
Oakland Detour Eastbound Open			May 2011	May 2011	-	●	
Oakland Detour Westbound Open			Feb 2012	Feb 2012	-	●	
OTD Westbound Access			Aug 2009	Aug 2009	-	●	
YBI Detour Open			Sep 2009	Sep 2009	-	●	See Page 15
Antioch Bridge Seismic Retrofit							
Contract Completion			Jul 2012	Jul 2012	-	●	See Page 30
Seismic Safety Completion			Apr 2012	Apr 2012	-	●	
Dumbarton Bridge Seismic Retrofit							
Contract Completion			Sep 2013	Sep 2013	-	●	See Page 32
Seismic Safety Completion			Sep 2013	Sep 2013	-	●	

● Within approved schedule and budget

● Identified potential project risks that could significantly impact approved schedules and budgets if not mitigated

● Known project impacts with forthcoming changes to approved schedules and budgets

⁽¹⁾ Figures may not sum up to totals due to rounding effects.

⁽²⁾ Construction administration of the OTD Detour is under the YBITS#1 contract.

⁽³⁾ Construction administration of the Cantilever segment will be under the YBITS#2 contract.

Regional Measure 1 Program Cost Summary (Millions)

	Contract Status	BATA Baseline Budget (July 2005)	BATA Approved Changes	Current BATA Approved Budget (May 2012)	Cost to Date (May 2012)	Current Cost Forecast (May 2012)	Cost Variance	Cost Status
		a	b	c = a + b	d	e	f = e - c	
Interstate 880/Route 92 Interchange Reconstruction								
Capital Outlay Construction	Complete	94.8	68.4	163.2	150.2	163.2	-	●
Capital Outlay Support		28.8	35.8	64.6	62.3	64.6	-	●
Capital Outlay Right-of-Way		9.9	7.3	17.2	14.7	17.2	-	●
Project Reserve		0.3	(0.3)	-	-	-	-	
Total I-880/SR-92 Interchange Reconstruction		133.8	111.2	245.0	227.2	245.0	-	
Other Completed Program Projects		1,978.8	182.6	2,161.4	2,089.1	2,161.4	-	
Total Regional Measure 1 Toll Bridge Program ¹		2,112.6	293.8	2,406.4	2,316.3	2,406.4	-	

- Within approved schedule and budget
 - Identified potential project risks that could significantly impact approved schedules and budgets if not mitigated
 - Known project impacts with forthcoming changes to approved schedules and budgets
- ¹ Figures may not sum up to totals due to rounding effects.

Regional Measure 1 Program Schedule Summary (Millions)

	BATA Baseline Completion Schedule (September 2005)	BATA Approved Changes (Months)	Current BATA Approved Completion Schedule (May 2012)	Current Completion Forecast (May 2012)	Schedule Variance (Months)	Schedule Status	Remarks/Notes
	g	h	i = g + h	j	k = j - i	l	
Interstate 880/Route 92 Interchange Reconstruction							
Contract Completion							
Interchange Reconstruction	Dec 2010	9	Sep 2011	Sep 2011	-	●	See Page 39





TOLL BRIDGE SEISMIC RETROFIT PROGRAM

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge Seismic Retrofit Strategy

When a 250-ton section of the upper deck of the East Span collapsed during the 7.1-magnitude Loma Prieta Earthquake in 1989, it was a wake-up call for the entire Bay Area. While the East Span quickly reopened within a month, a critical question lingered: How could the Bay Bridge - a vital regional lifeline structure - be strengthened to withstand the next major earthquake? Seismic experts from around the world determined that to make each separate element seismically safe on a bridge of this size, the work must be divided into numerous projects. Each project presents unique challenges. Yet there is one common challenge - the need to accommodate the more than 280,000 vehicles that cross the bridge each day.



West Approach Overview

West Approach Seismic Replacement Project

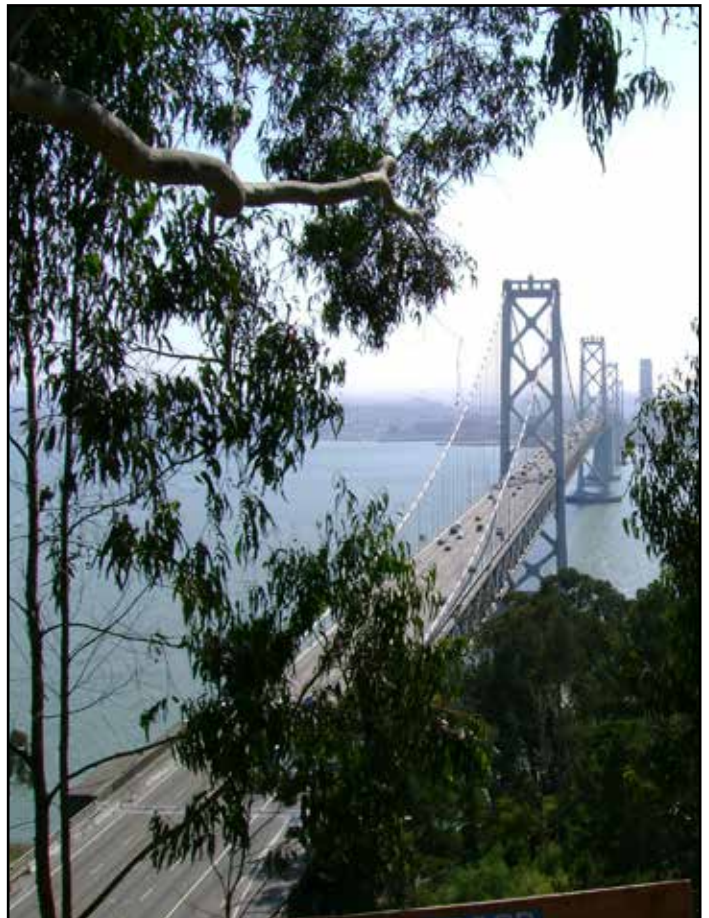
Project Status: Completed 2009

Seismic safety retrofit work on the West Approach in San Francisco, bounded on the west by 5th Street and on the east by the anchorage of the west span at Beale Street, involved completely removing and replacing this one-mile stretch of Interstate 80, as well as six on and off-ramps within the confines of the West Approach's original footprint. This project was completed on April 8, 2009.

West Span Seismic Retrofit Project

Project Status: Completed 2004

The West Span lies between Yerba Buena Island and San Francisco and is made up of two complete suspension spans connected at a center anchorage. Retrofit work included adding massive amounts of steel and concrete to strengthen the entire West Span, along with new seismic shock absorbers and bracing.



San Francisco-Oakland Bay Bridge West Span



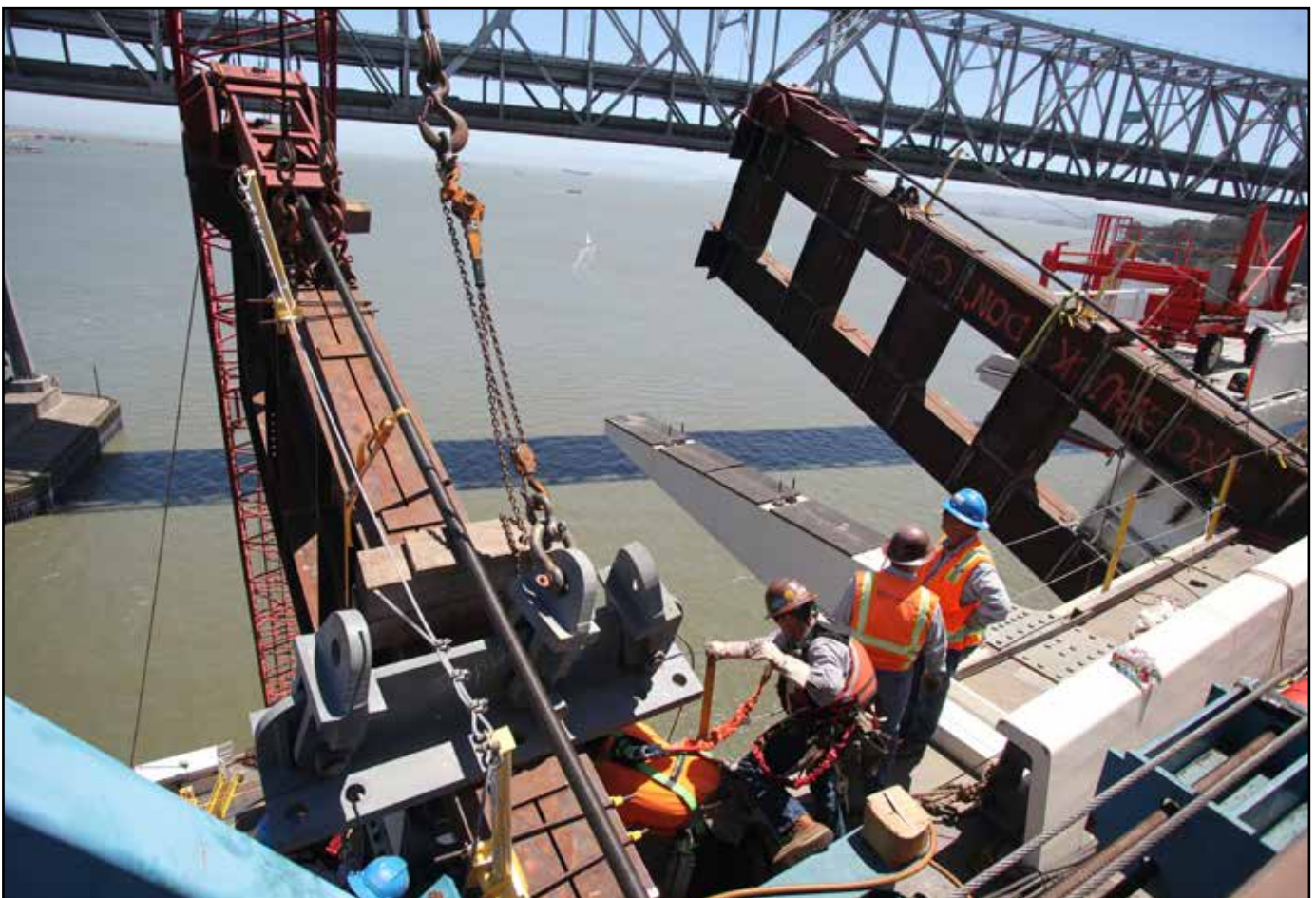
East Span Seismic Replacement Project

Project Status: **In Construction**

Rather than a seismic retrofit, the two-mile long East Span is being completely rebuilt. When completed, the new East Span will consist of several different sections, but will appear as a single streamlined span. The eastbound and westbound lanes of the East Span will no longer include upper and lower decks. The lanes will instead be side-by-side, providing motorists with expansive views of the bay. These views will also be enjoyed by bicyclists and pedestrians, thanks to a new bike path on the south side of the bridge that will extend all the way to Yerba Buena Island. The new span will be aligned north of the existing bridge to allow traffic to continue to flow on the existing bridge as crews build the new span.

The new span will feature the world's longest Self-Anchored Suspension (SAS) bridge that will be connected to an elegant roadway supported by piers (Skyway), which will gradually slope down toward the Oakland shoreline (Oakland Touchdown). A new transition structure on Yerba Buena Island (YBI) will connect the SAS to the YBI Tunnel and will transition the East Span's side-by-side traffic to the upper and lower decks of the tunnel and West Span.

When construction of the new East Span has been completed and vehicles have been safely rerouted to it, the original East Span will be demolished.



The PWS Cable Swing-Out Framing Being Erected on the Eastbound Roadway Box Being Installed



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Summary

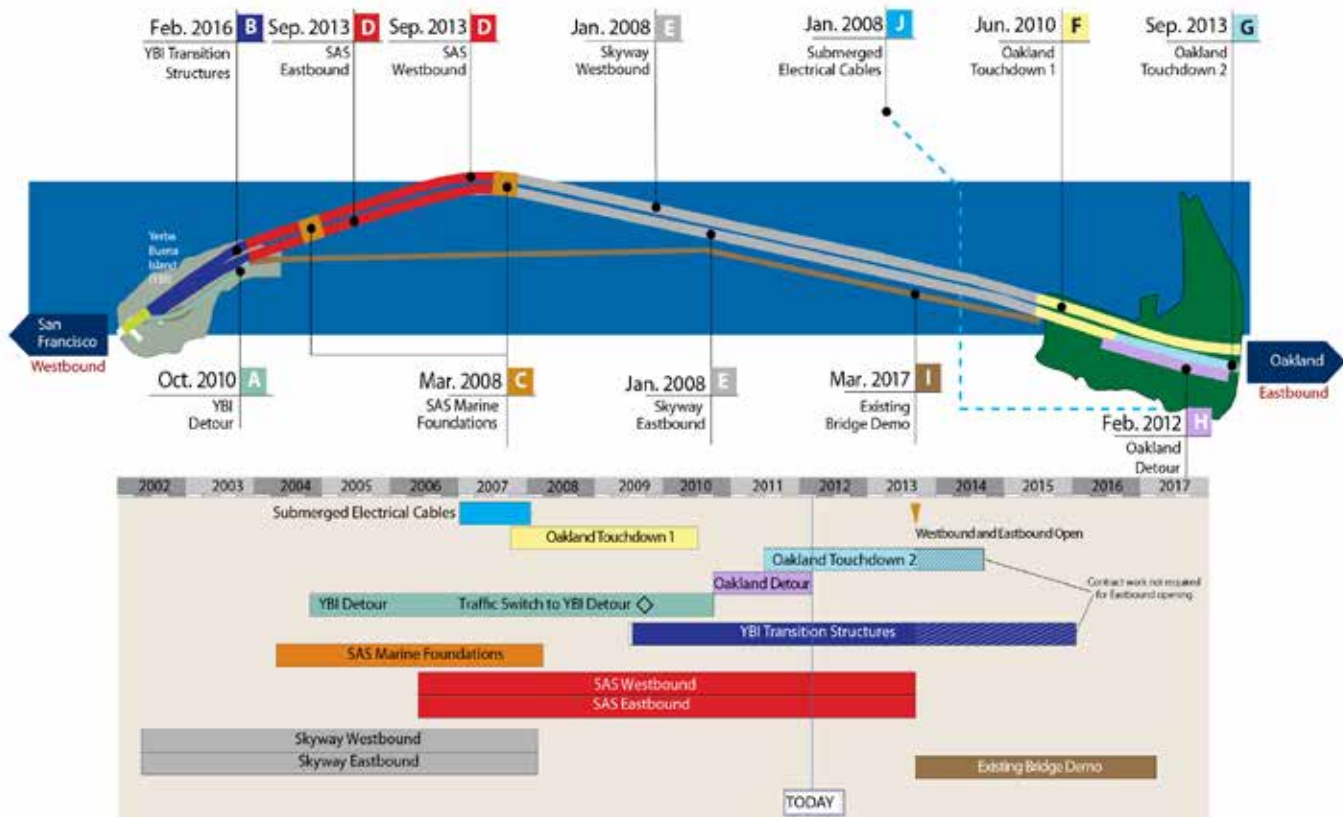
The new East Span bridge can be split into four major components - the Skyway, the Self-Anchored Suspension bridge in the middle, the Yerba Buena Island Transition Structures and Oakland Touchdown approaches. Each component is being constructed by one to three separate contracts that have been sequenced together to reduce schedule risk.

Highlighted below are the major East Span contracts and their schedules. The letter designation before each contract corresponds to contract descriptions in the report.



Overview of the San Francisco-Oakland Bay Bridge East Span Construction Progress

SFOBB East Span Work Sequence



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Yerba Buena Island Detour (YBID)

As with all of the Toll Bridge Seismic Retrofit Program's projects, crews built the Yerba Buena Island Detour structure (YBID) without disrupting traffic. To accomplish this task, YBID eastbound and westbound traffic was shifted off the existing roadway and onto a temporary detour over Labor Day weekend 2009. Drivers will use this detour, just south of the original roadway, until traffic is moved onto the new East Span.

A YBID Contract

Contractor: C.C. Myers, Inc.

Approved Capital Outlay Budget: \$492.8 M

Status: Completed October 2010

This contract was originally awarded in early 2004 to construct the detour structure for the planned 2006 opening of the new East Span. Because of a lack of funding, the SAS Superstructure contract was re-advertised in 2005 and the opening was rescheduled to 2013. To better integrate the contract into the current East Span schedule and to improve seismic safety and mitigate future construction risks, the TBPOC approved a number of changes to the contract, including adding the deck replacement work near the tunnel that was rolled into place over the 2007 Labor Day weekend advancing future transition structure foundation work and making design enhancements to the temporary detour structure. These changes increased the budget and forecast for the contract to cover the revised project scope and reduce project risks.



YBID East Tie-In Rolled in on Labor Day 2009 Weekend



West Tie-In Phase #1 Rolled in on Labor Day Weekend 2007

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Yerba Buena Island Transition Structures (YBITS)

The new Yerba Buena Island Transition Structures contract (YBITS) will connect the new SAS bridge span to the existing Yerba Buena Island Tunnel, transitioning the new side-by-side roadway decks to the upper and lower decks of the tunnel. The new structures will be cast-in-place reinforced concrete structures that will look very similar to the already constructed Skyway structures. While some YBITS foundations and columns were advanced by the YBID contract, the remaining work is being completed under three separate YBITS contracts.

B YBITS #1 Contract

Contractor: MCM Construction, Inc.

Approved Capital Outlay Budget: \$199.7 M

Status: 56% Complete as of May 2012

The YBITS #1 contract will construct the mainline roadway structure from the SAS bridge to the YBI tunnel. On February 4, 2010, Caltrans awarded the YBITS #1 contract to MCM Construction, Inc.

Status: The construction of the westbound roadway deck was completed in February 2012. Westbound falsework was removed and modified for use for the eastbound roadway deck in April 2012. The eastbound roadway construction began in late December 2011 and will be completed to Hinge K and turned over to American Bridge Fluor (ABF) by the end of 2012.

YBITS #2 Contract

Contractor: TBD

Approved Capital Outlay Budget: \$59.0 M

Status: Advertised on April 9, 2012

The YBITS #2 contract will demolish the detour viaduct after all traffic is shifted to the new bridge and will construct a new eastbound on-ramp to the bridge in its place. The new ramp will also provide the final link for bicycle/pedestrian access off the SAS bridge onto Yerba Buena Island. To expedite opening of a new eastbound on-ramp and the pedestrian/bicycle pathway from Yerba Buena Island, the TBPOC has decided to split the bridge dismantling project into at least two contracts. The dismantling of the superstructure of the main cantilever section of the existing bridge will be incorporated into the YBITS #2 contract, while the remaining portions of the existing bridge will be removed by separate contract or contracts yet to be determined. The YBITS #2 contract, including the cantilever truss demolition, was advertised on April 9, 2012, and bid opening is forecast for September 25, 2012.

YBITS Landscaping Contract

Contractor: TBD

Approved Capital Outlay Budget \$3.3 M

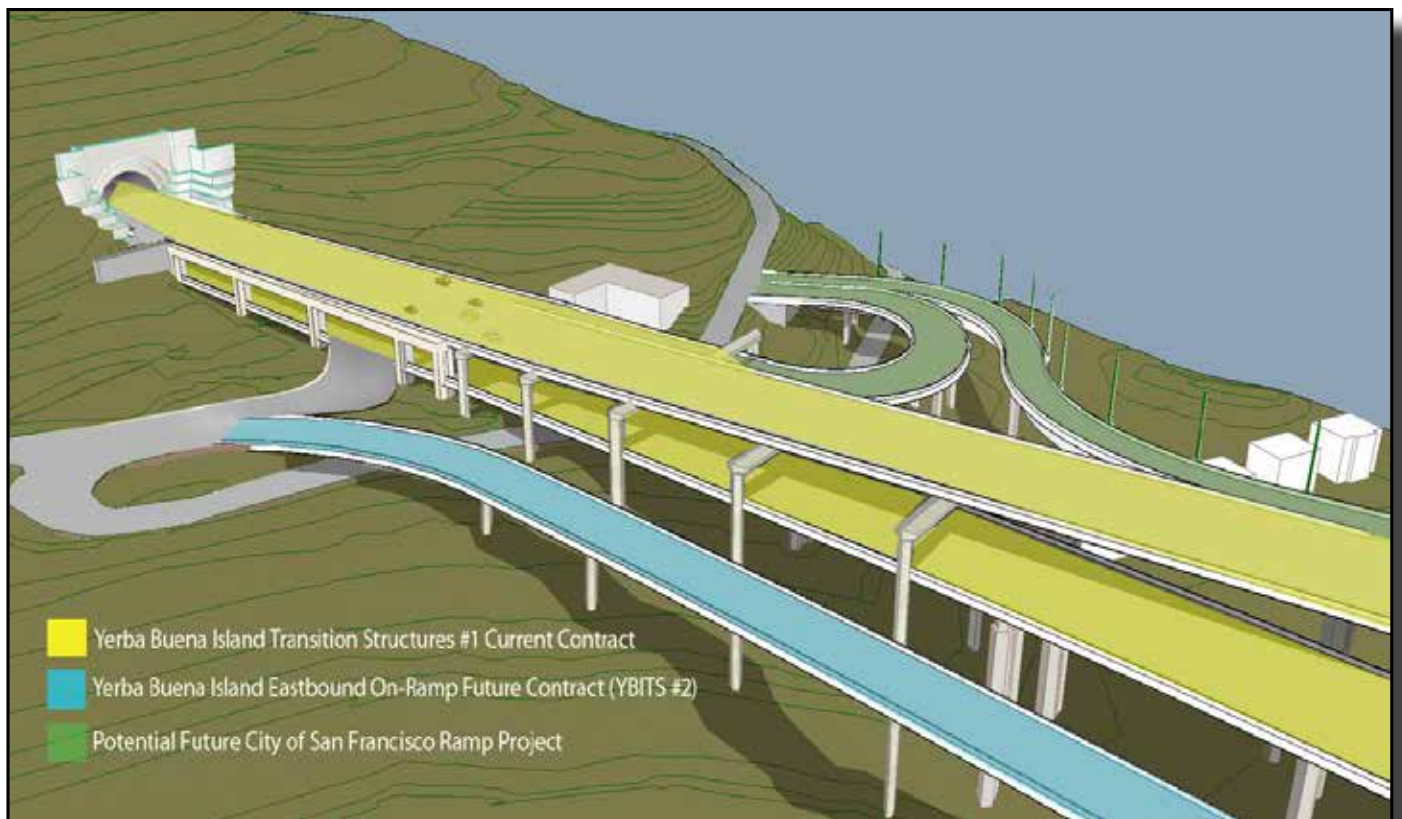
Status: In Design

Upon completion of the YBITS work, a follow-on landscaping contract will be executed to replant and landscape the area.





YBITS #1 Roadway Deck Construction in Progress



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Self-Anchored Suspension (SAS) Bridge

If one single element bestows world class status on the new Bay Bridge East Span, it is the Self-Anchored Suspension (SAS) bridge. This engineering marvel will be the world's largest SAS span at 2,047 feet in length, as well as the first bridge of its kind built with a single tower.

The SAS was separated into three separate contracts - construction of the land-based foundations and columns at pier W2; construction of the marine-based foundations and columns at piers T1 and E2; and construction of the SAS steel superstructure, including the tower, roadway and cabling. Construction of the foundations at pier W2 and at piers T1 and E2 was completed in 2004 and 2007, respectively.



SAS Marine Foundation - E2 Foundation with Completed Westbound Column

SAS Land Foundation Contract

Contractor: West Bay Builders, Inc.
Approved Capital Outlay Budget: \$26.5 M
Status: Completed October 2004

The twin W2 columns on Yerba Buena Island provide essential support for the western end of the SAS bridge, where the single main cable for the suspension span will extend down from the tower and wrap around and under the western end of the roadway deck. Each of these huge columns required massive amounts of concrete and steel and are anchored 80 feet into the island's solid bedrock.

C SAS Marine Foundations Contract

Contractor: Kiewit/FCI/Manson, Joint Venture
Approved Capital Outlay Budget: \$278.6 M
Status: Completed January 2008

Construction of the piers at E2 and T1 (see rendering on facing page) required significant on-water resources to drive the foundation support piles down, not only to bedrock, but also through the bay water and mud.

The T1 foundation piles extend 196 feet below the waterline and are anchored into bedrock with heavily reinforced concrete rock sockets that are drilled into the rock. Driven nearly 340 feet deep, the steel and concrete E2 foundation piles were driven 100 feet deeper than the deepest timber piles of the existing east span in order to get through the bay mud and reach solid bedrock.



D SAS Superstructure Contract

Contractor: American Bridge/Fluor Enterprises, Joint Venture

Approved Capital Outlay Budget: \$2.05 B

Status: 85% Complete as of May 2012

The SAS bridge is not just another suspension bridge. Rising 525 feet above mean sea level and embedded in bedrock, the single-tower SAS span is designed to withstand a massive earthquake. Traditional main cable suspension bridges have twin cables with smaller suspender cables connected to them. While there will appear to be two main cables on the SAS, it is actually a single continuous cable. This single cable will be anchored within the eastern end of the roadway, carried over the tower and then wrapped around the two side-by-side decks at the western end.

The single-steel tower is made up of four separate legs connected by shear link beams which function much like a fuse in an electrical circuit. These beams will absorb most of the impact from an earthquake, preventing damage to the tower legs.

The next several pages highlight the construction sequence of the SAS and are followed by detailed updates on specific construction activities.



Architectural Rendering of New Self-Anchored Suspension Span and Skyway

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Self-Anchored Suspension (SAS) Construction Sequence

STEP 1 - CONSTRUCT TEMPORARY SUPPORT STRUCTURES

All temporary support foundations and structures were completed in September 2010 between the Skyway and Yerba Buena Island to support the westbound and eastbound roadway box erections.



STEP 2 - INSTALL ROADWAYS

All of the 28 steel roadway boxes and 17 crossbeams have been erected as of the end of October 2011.

Status: Roadway deck interior field painting continues. Bike path railing and steel barrier installation continues on the roadway deck along with mechanical, electrical and piping installation.



STEP 3 - INSTALL TOWER

All tower legs, tower grillage and tower saddle were erected using the self-rising crane as of mid-May 2011. The tower head will be installed after cable erection and suspenders have been completed in mid-2012.

Status: Mechanical, electrical and piping installation continues in the tower. Non-Destructive Testing (NDT) and repair of the tower base shear plate welding is ongoing. Welding of the diaphragms to the shear plates continues.



STEP 4 - MAIN CABLE AND SUSPENDER INSTALLATION

The main cable haul started in late December 2011 from the east end of the westbound roadway deck moving over the tower saddle, wrapping around pier W2 west deviation saddles and returning to the tower saddle to the east end of eastbound roadway deck where it will then be anchored. Suspender cables (114) will be added after all 137 cable bundles have been hauled, compacted and cable bands installed to lift the roadway deck off the temporary support structure.



Step 4

Status: The parallel wire strand (PWS) cable installation was completed on April 9, 2012. Compaction started on April 16, 2012, and was completed in early May 2012, with the exception of the swing-out cable portions, which is scheduled for late June 2012. Ninety percent of all suspenders have been installed along with all cable bands with the exception of the PWS Cable swing-out framing erection, which is scheduled for June 2012.

STEP 5 - WESTBOUND AND EASTBOUND SEISMIC SAFETY OPENING

The new bridge will now open simultaneously in both the westbound and eastbound directions on Labor Day September 2, 2013.



Step 5

Status: The Self-Anchored Suspension (SAS) segment is in progress and construction is scheduled to be complete and ready for seismic safety opening in both eastbound and westbound directions by September 2013.

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

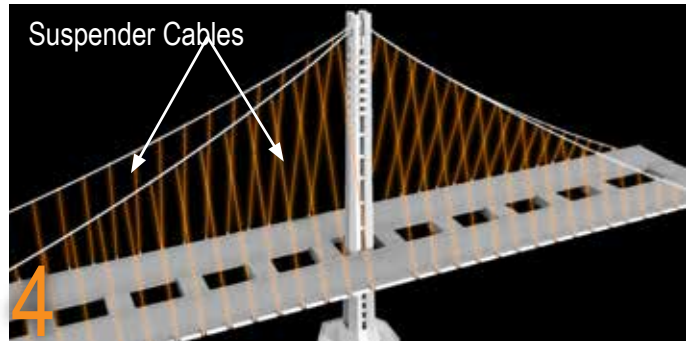
Self-Anchored Suspension (SAS) Superstructure Main Cable Completion Activities



1 CABLE STRAND HAULING

Crews haul the 137 individual steel wire strands that comprise the nearly 1-mile long single main cable. The strands are adjusted and then anchored into the east end of the SAS.

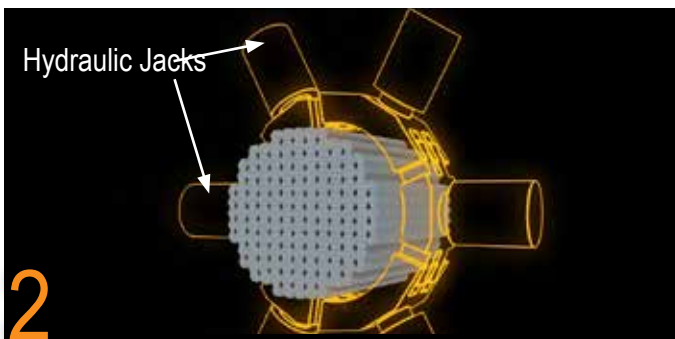
Status: Complete



4 SUSPENDER CABLES INSTALLED

Workers begin placing the suspender cables that connect the main cable to the road-decks. Not all of the suspender cables need to be attached before load transfer begins.

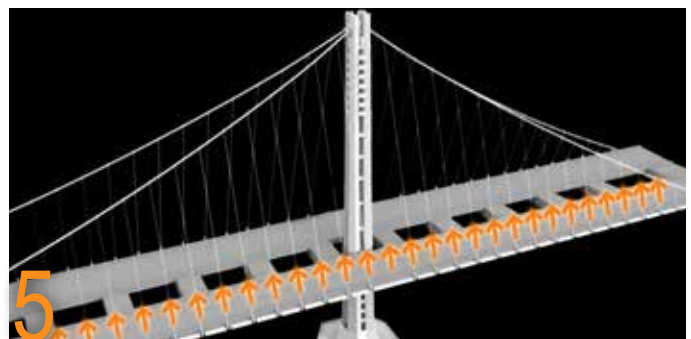
Status: In Progress



2 CABLE STRAND COMPACTING

Four compacting machines containing hydraulic jacks are used to compress the 137 steel wire strands into the shape of the main cable. Temporary bands are placed to maintain the shape.

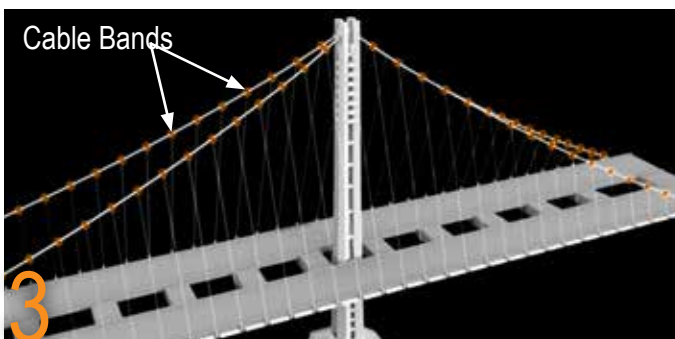
Status: Complete except for swing-out portions. Forecast July 2012.



5 LOAD TRANSFER

Using the attached suspender cables, crews begin the process of transferring the weight of the span from the temporary supports under the bridge to the main cable.

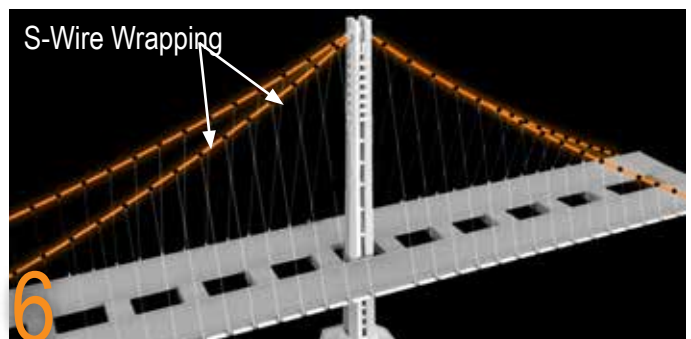
Status: Start late August 2012



3 CABLE BANDS INSTALLED

Crews install 114 permanent steel cable bands along the main cable. These bands maintain the shape of the cable, and serve as anchor points for the suspender cables.

Status: Complete



6 S-WIRE WRAP

After load transfer, the main cable is wrapped in S-wire to protect the cable against corrosion. After the cable is wrapped, it is painted.

Status: Start September 2012



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Skyway

The Skyway, which comprises much of the new East Span, will drastically change the appearance of the Bay Bridge. Replacing the gray steel that currently cages drivers, a graceful, elevated roadway supported by piers will provide sweeping views of the bay.

E Skyway Contract

Contractor: Kiewit/FCI/Manson, Joint Venture

Approved Capital Outlay Budget: \$1.25 B

Status: Completed April 2008

Extending for more than a mile across Oakland mudflats, the Skyway is the longest section of the East Span. It sits between the new Self-Anchored Suspension (SAS) span and the Oakland Touchdown. In addition to incorporating the latest seismic-safety technology, the side-by-side roadway decks of the Skyway feature shoulders and lane widths built to modern standards.

The Skyway's decks are composed of 452 pre-cast concrete segments (standing three stories high), containing approximately 200 million pounds of structural steel, 120 million pounds of reinforcing steel, 200 thousand linear feet of piling and about 450 thousand cubic yards of concrete. These are the largest segments of their kind ever cast and were lifted into place by custom-made winches.

The Skyway marine foundation consists of 160 hollow steel pipe piles measuring eight feet in diameter and dispersed among 14 sets of piers. The 365-ton piles were driven more than 300 feet into the deep bay mud. The new East Span piles were battered or driven in at an angle, rather than vertically, to obtain maximum strength and resistance.

Designed specifically to move during a major earthquake, the Skyway features several state-of-the-art seismic safety innovations, including 60-foot-long hinge pipe beams. These beams will allow deck segments on the Skyway to move, enabling the deck to withstand greater motion and to absorb more earthquake energy.

The Skyway light poles began arriving in March 2012 and are forecast to be installed in June 2012 following installation of the light fixtures.



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Oakland Touchdown

When completed, the Oakland Touchdown (OTD) structures will connect Interstate 80 in Oakland to the side-by-side decks of the new East Span. For westbound drivers, the OTD will be their introduction to the graceful new East Span. For eastbound drivers from San Francisco, this section of the bridge will carry them from the Skyway to the East Bay, offering unobstructed views of the Oakland hills.

The OTD approach structures to the Skyway will be constructed in three phases. The first phase, constructed under the OTD #1 contract, built the new westbound approach structure. Due to physical constraints with the existing bridge, the OTD #1 contract was only able to construct a portion of the eastbound approach. To facilitate opening the bridge in both directions at the same time, the current phase of work, performed by the Oakland Detour contractor, is widening the upper deck of the Oakland end of the existing bridge to allow for a traffic shift to the north that removes the physical constraint to completing the eastbound structure. The third phase, to be constructed by a future OTD #2 contract, will complete the eastbound lanes and provide the traffic switch to the new structure in both directions. This will allow the bridge to open simultaneously in both directions.

F Oakland Touchdown #1 Contract

Contractor: MCM Construction, Inc.

Approved Capital Outlay Budget: \$212.0 M

Status: Completed June 2010

The OTD #1 contract constructed the entire 1,000-foot-long westbound approach from the toll plaza to the Skyway. When open to traffic, the westbound approach structure will provide direct access to the westbound Skyway. In the eastbound direction, the contract constructed a portion of the eastbound structure and all of the eastbound foundations that are not in conflict with the existing bridge.

Status: MCM Construction, Inc. completed OTD #1 westbound and eastbound phase 1 on June 8, 2010.

G Oakland Touchdown #2 Contract

Contractor: Flatiron West, Inc.

Approved Capital Outlay Budget: \$62.0 M

Status: In Design

The OTD #2 contract will complete the eastbound approach structure from the end of the Skyway to Oakland. This work is critical to the eastbound opening of the new bridge by September 2013.

Status: The TBPOC approved an acceleration plan to construct a detour at the Oakland end of the bridge to allow for expedited construction of the OTD #2 contract. OTD #2 was advertised on March 12, 2012, and was awarded on March 29, 2012. Construction will begin on June 25, 2012.



Aerial View of the Eastbound Oakland Detour with the EBMUD Outfall Crossing Structure on the left and the Westbound Oakland Detour Open to Traffic

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Oakland Detour

H Oakland Detour

Contractor: MCM Construction, Inc.

Approved Capital Outlay Budget: \$51.0 M

Status: 100% Complete as of May 2012

To ensure a simultaneous eastbound and westbound opening of the bridge by September 2013, the TBPOC has approved an acceleration plan that will construct a detour at the Oakland end of the bridge to allow for expedited construction of the OTD #2 contract. The detour realigns the existing bridge approach to the south to allow for construction of the remaining portion of OTD that was in conflict with the existing bridge.

Status: The westbound detour construction is complete and was opened to traffic on February 19, 2012. MCM finished clean-up and vacated the area in early April 2012.



Oakland Detour Westbound Expansion Structure



Oakland Westbound Detour (Looking East) AC Asphalt Installed



Preparation for Demolition of the Existing Westbound Partial Structure

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Existing East Span Bridge Demolition

I Existing East Span Demolition

Contractor: TBD

Approved Capital Outlay Budget: \$239.1 M

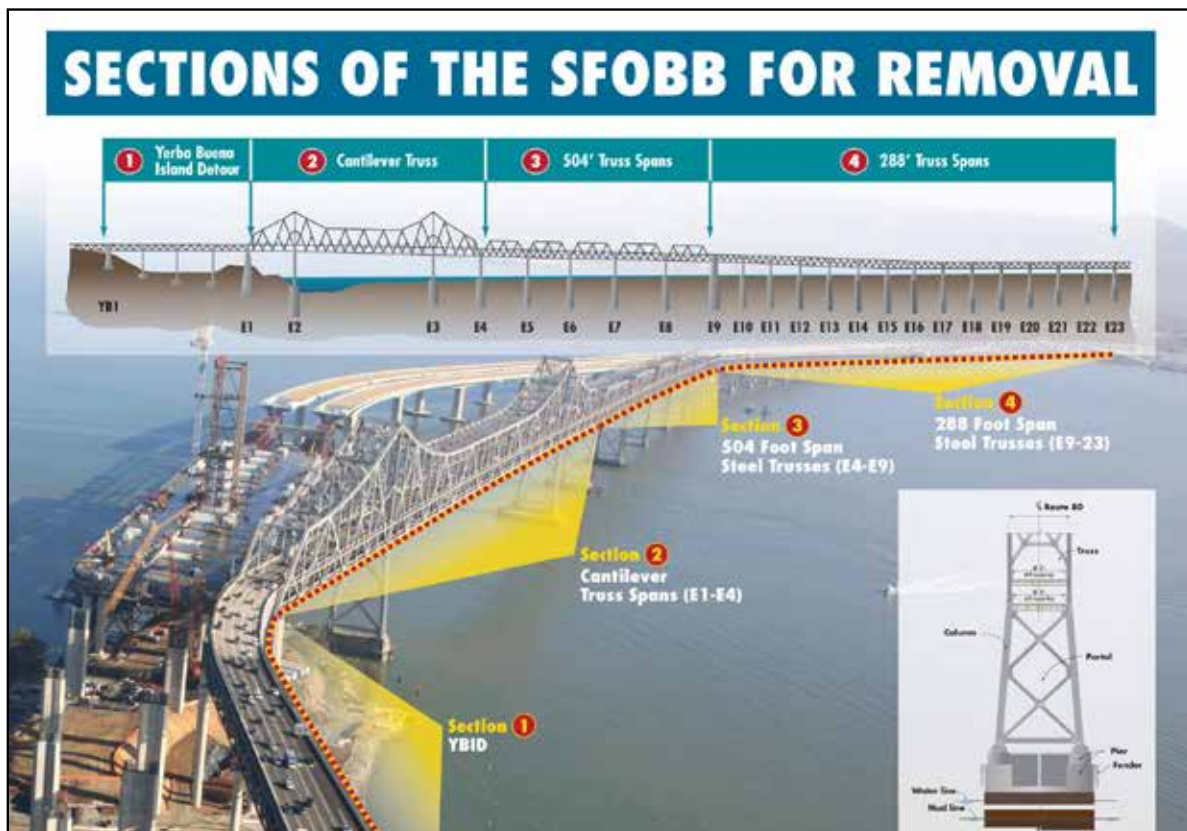
Status: Advertised on April 9, 2012

Design work on the demolition of the existing bridge is ongoing. The environmental clearance and all permits were received on February 29, 2012. To expedite the opening of a new eastbound on-ramp and the pedestrian/bicycle pathway from Yerba Buena Island to Oakland, the TBPOC has decided to split the existing bridge dismantling project into at least two contracts. The dismantling of the superstructure of the main cantilever section of the existing east span of the bridge was incorporated into the YBITS #2 contract, while the remaining portions will be removed by separate contract or contracts yet to be determined for the superstructure and marine foundations.

Status: The cantilever portion of the demolition was advertised on April 9, 2012.



Dismantling Scope Included in the Future YBITS#2 Contract - YBI Detour at left, E-1 column in center, Cantilever Bridge Deck at right



TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Other Contracts

A number of contracts needed to relocate utilities, clear areas of archeological artifacts and prepare areas for future work have already been completed. The last major contract will be the eventual demolition and removal of the existing bridge, which by that time will have served the Bay Area for nearly 80 years. Following is a status of some the other East Span contracts.

J Electrical Cable Relocation

Contractor: Manson Construction

Approved Capital Outlay Budget: \$9.6 M

Status: Completed January 2008

A submerged cable from Oakland that is close to where the new bridge will touch down supplies electrical power to Treasure Island. To avoid any possible damage to the cable during construction, two new replacement cables were run from Oakland to Treasure Island. The extra cable was funded by the Treasure Island Development Authority.



Archeological Investigations

Yerba Buena Island Substation

Contractor: West Bay Builders

Approved Capital Outlay Budget: \$11.6 M

Status: Completed May 2005

This contract relocated an electrical substation just east of the Yerba Buena Island Tunnel in preparation for the new East Span.



New YBI Electrical Substation



Stormwater Treatment Measures

Contractor: Diablo Construction, Inc.
 Approved Capital Outlay Budget: \$18.3 M
 Status: Completed December 2008

The Stormwater Treatment Measures contract implemented a number of best practices for the management and treatment of stormwater runoff. Focused on the areas around and approaching the toll plaza, the contract added new drainage and built new bio-retention swales and other related constructs.



Stormwater Retention Basin

East Span Interim Seismic Retrofit

Contractors: 1) California Engineering
 2) Balfour Beatty
 Approved Capital Outlay Budget: \$30.8 M
 Status: Completed October 2000

After the 1989 Loma Prieta Earthquake, and before the final retrofit strategy was determined for the East Span, Caltrans completed an interim retrofit of the existing bridge to prevent a catastrophic collapse of the bridge should a similar earthquake occur before the East Span was completely replaced. The interim retrofit was performed under two separate contracts that lengthened pier seats, added some structural members, and strengthened areas of the bridge so they would be more resilient during an earthquake.



Existing East Span of the San Francisco-Oakland Bay Bridge

Pile Installation Demonstration

Contractor: Manson and Dutra, Joint Venture
 Approved Capital Outlay Budget: \$9.2 M
 Status: Completed December 2000

While large-diameter battered piles are common in offshore drilling, the new East Span is one of the first bridges to use them in its foundations. To minimize project risks and build industry knowledge, a pile installation demonstration project was initiated to prove the efficacy of the proposed technology and methodology. The demonstration was highly successful and helped result in zero contract change orders or claims for pile driving on the project.



Battered Pile Installation Demonstration

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Antioch Bridge Seismic Retrofit Project

Contractor: California Engineering Contractors, Inc.

Approved Capital Outlay Budget: \$51.0 M

Status: Seismically Complete as of May 12, 2012

Serving the Delta region of the Bay Area, the Antioch Bridge takes State Route 160 traffic over the San Joaquin River, linking eastern Contra Costa County with Sacramento County. The current 1.8-mile-long steel plate girder bridge was opened in 1978 with one lane in each direction. The major retrofit measure for the bridge includes installing seismic isolation bearings at each of the 41 piers, strengthening piers 12 through 31 with steel cross-bracing between column bents, and installing steel casings at all columns located at the Sherman Island approach slab bridge.

Status: Seismic safety opening was achieved on April 12, 2012 and contract completion is forecast for July 2012.

Seismic isolation bearings will allow the superstructure of the bridge to move independently from the pier and column substructure during an earthquake. All seismic isolation bearings have been fabricated, tested and installed (100%).

At piers 12 through 31, center steel cross-bracing is being added between the pier columns to strengthen the pier. The work requires off-site fabrication of the steel cross-bracing and on-site preparation of the existing columns to ensure proper bond with the new bracing. Installation of cross-bracing has been completed at all 20 piers.

Columns supporting the approach slab bridge located on Sherman Island are being strengthened with steel column casing jackets. There are a total of 116 columns that have been retrofitted with steel casing jackets. The approach slab bridge expansion joints have been retrofitted with seat extenders. All of the 12 seat extenders have been installed.

Landscaping at the south end of the bridge is 100% complete and the 60-day plant establishment period ended April 26, 2012.



Temporary Contract Yard Removal



Temporary Roadway Removal Started May 15, 2012



Antioch Bridge Installing Cross Bracing as Part of the Seismic Retrofit Construction



Antioch Bridge with Completed Cross Bracings

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Dumbarton Bridge Seismic Retrofit Project

Contractor: Shimmick Construction Company, Inc.

Approved Capital Outlay Budget: \$92.7 M

Status: 70% Complete as of May 2012

The current Dumbarton Bridge was opened to traffic in 1982 linking the cities of Newark in Alameda County and East Palo Alto in San Mateo County. The 1.6-mile long bridge has six lanes (three in each direction) and an eight-foot-wide bicycle/pedestrian pathway. The bridge is a combination of three bridge types; reinforced concrete slab approaches supported on multiple pile extension columns, precast-prestressed concrete delta girders and steel box girders supported on reinforced concrete piers. The current retrofit strategy for the bridge includes superstructure and deck modifications and installation of isolation bearings.

Status: The main bridge structure between piers 16-31 will be raised approximately 5 inches in order for isolation bearings to be installed to separate the superstructure from the substructure during seismic events. In preparation, the bridge piers are being widened with reinforced concrete to accommodate the new bearings. Work continues with reinforcing steel and concrete placement at these main bridge piers.

Along the reinforced concrete slab approaches, the bent caps are being extended and tied to new 48-inch diameter steel piles that have been installed to strengthen the bridge. Bent cap extensions along the east and west trestle approach are now complete.

The concrete coring operation to widen the pier caps is complete at all of the 14 locations. Concrete has been placed at 15 of 16 piers. The installation of jacking frames is complete at piers 17 through 23, 29 and 30. Welding is ongoing at piers 25 through 28.

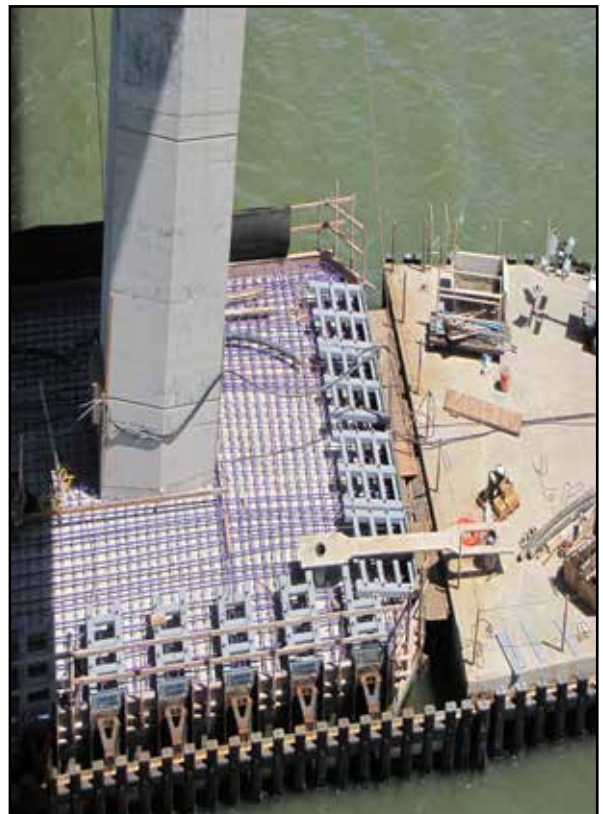
Work at the pumping plant is substantially complete. Fender rehabilitation work is ongoing at piers 23 and 24. Pier footing overlay concrete has been placed at piers 17 through 22 and piers 25 through 30.

Retrofitting of the existing piles at the Ravenswood pier and pier removal operation are ongoing.

The Dumbarton Bridge was closed for construction over the 2012 Memorial Day weekend to install a seismic joint at the west end of the bridge. The bridge will be closed again over the Labor Day 2012 weekend to install a seismic joint at the east end of the bridge.



Demolition of Grout Pads at Pier 20



Pier 24 Fender Rehab



Pier 31 Scarify Concrete



Pier 30 Jacking Frame

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Other Completed Projects

In the 1990s, the State Legislature identified seven of the nine state-owned toll bridges for seismic retrofit. In addition to the San Francisco-Oakland Bay Bridge, these included the Benicia-Martinez, Carquinez, Richmond-San Rafael and San Mateo-Hayward bridges in the Bay Area, and the Vincent Thomas and Coronado bridges in Southern California. Other than the East Span of the Bay Bridge, the retrofits of all of the bridges have been completed as planned.

San Mateo-Hayward Bridge Seismic Retrofit Project

Project Status: Completed 2000

The San Mateo-Hayward Bridge seismic retrofit project focused on strengthening the high-rise portion of the span. The foundations of the bridge were significantly upgraded with additional piles.



High-Rise Section of San Mateo-Hayward Bridge

1958 Carquinez Bridge Seismic Retrofit Project

Project Status: Completed 2002

The eastbound 1958 Carquinez Bridge was retrofitted in 2002 with additional reinforcement of the cantilever thru-truss structure.

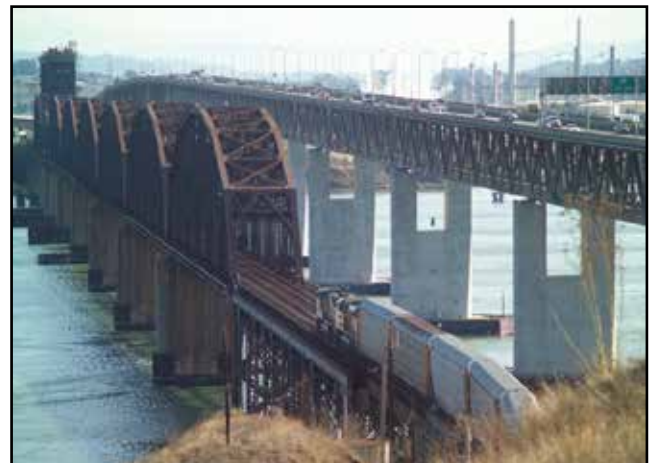


1958 Carquinez Bridge (foreground) with the 1927 Span (middle) under Demolition and the New Alfred Zampa Memorial Bridge (background)

1962 Benicia-Martinez Bridge Seismic Retrofit Project

Project Status: Completed 2003

The southbound 1962 Benicia-Martinez Bridge was retrofitted to "Lifeline" status with the strengthening of the foundations and columns and the addition of seismic bearings that allow the bridge to move during a major seismic event. The Lifeline status means the bridge is designed to sustain minor to moderate damage after a seismic event and to reopen quickly to emergency response traffic.



1962 Benicia-Martinez Bridge (right)

Richmond-San Rafael Bridge Seismic Retrofit Project

Project Status: Completed 2005

The Richmond-San Rafael Bridge was retrofitted to a “No Collapse” classification to avoid catastrophic failure during a major seismic event. The foundations, columns, and truss of the bridge were strengthened, and the entire low-rise approach viaduct from Marin County was replaced.



Richmond-San Rafael Bridge

Los Angeles-Vincent Thomas Bridge Seismic Retrofit Project

Project Status: Completed 2000

The Vincent Thomas Bridge is a 1,500-foot long suspension bridge crossing the Los Angeles Harbor in Los Angeles that links San Pedro with Terminal Island. The bridge was one of two state-owned toll bridges in Southern California (the other being the San Diego-Coronado Bridge). Opened in 1963, the bridge was seismically retrofitted as part of the TBSRP in 2000.



Los Angeles-Vincent Thomas Bridge

San Diego-Coronado Bridge Seismic Retrofit Project

Project Status: Completed 2002

The San Diego-Coronado Bridge crosses over San Diego Bay and links the cities of San Diego and Coronado. Opened in 1969, the 2.1-mile long bridge was seismically retrofitted as part of the TBSRP in 2002.



San Diego-Coronado Bridge





Antioch Bridge

REGIONAL MEASURE 1 TOLL BRIDGE PROGRAM

REGIONAL MEASURE 1 PROGRAM

Completed Projects

In November 1988, Bay Area voters approved Regional Measure 1 (RM 1), which authorized a standard auto toll of \$1 for all seven state-owned Bay Area toll bridges. The additional revenues generated by the toll increase were identified for use for certain highway and bridge improvements, public transit rail extensions, and other projects that reduce congestion in the bridge corridors.

The toll bridge projects identified by RM 1 are complete and are as follows:

Richmond Parkway Construction Project

Project Status: Completed 2001

The final connections to the Richmond Parkway from Interstate 580 near the Richmond-San Rafael Bridge were completed in May 2001.

San Mateo-Hayward Bridge Widening Project

Project Status: Completed 2003

This project expanded the low-rise concrete trestle section of the San Mateo-Hayward Bridge to allow for three lanes in each direction to match the existing configuration of the high-rise steel section of the bridge.



Widening of the San Mateo-Hayward Bridge Trestle on Left

New Alfred Zampa Memorial (Carquinez) Bridge Project Project Status: Completed 2003

The new western span of the Carquinez Bridge, which replaced the original 1927 span, is a twin-towered suspension bridge with three mixed-flow lanes, a new carpool lane, shoulders and a bicycle/pedestrian pathway.



New Alfred Zampa Memorial (Carquinez) Bridge Soon after Opening to Traffic, with Crockett Interchange Still under Construction

Bayfront Expressway (State Route 84) Widening Project

Project Status: Completed 2004

This project expanded and improved the roadway from the Dumbarton Bridge touchdown to the US 101/ Marsh Road interchange by adding additional lanes and turn pockets and improving bicycle/pedestrian access in the area.

Richmond-San Rafael Bridge Rehabilitation Projects

Project Status: Completed 2006

Two major rehabilitation projects for the Richmond-San Rafael Bridge were funded and completed: (1) replacement of the western concrete approach trestle and ship-collision protection fender system; and (2) rehabilitation of deck joints and resurfacing of the bridge deck.

In 2005, along with the seismic retrofit of the bridge, the trestle and fender replacement work was completed as part of the same project. Under a separate contract in 2006, the bridge was resurfaced with a polyester concrete overlay along with the repair of numerous deck joints.



New Richmond-San Rafael Bridge West Approach Trestle under Construction

Benicia-Martinez Bridge Project

Project Status: Completed 2009

A two-year project to rehabilitate and reconfigure the original Benicia-Martinez Bridge began shortly after the opening of the new Congressman George Miller Bridge. The existing 1.2-mile roadway surface on the steel deck truss bridge was modified to carry four lanes of southbound traffic (one more than before) - with shoulders on both sides - plus a bicycle/pedestrian path on the west side of the span that connects to Park Road in Benicia and to Marina Vista Boulevard in Martinez. Reconstruction of the east side of the bridge and approaches was completed in August 2008. Reconstruction of the west side of the bridge and its approaches and construction of the bicycle/pedestrian pathway were completed in August 2009.

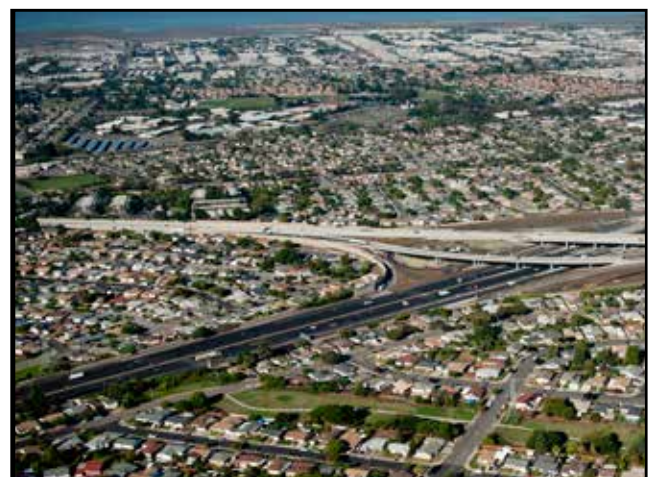


Benicia-Martinez Bridge

Interstate 880/State Route 92

Project Status: Completed 2011

This corridor was consistently one of the Bay Area's most congested during the evening commute. This was due in part to the lane merging and weaving that was required by the then-existing cloverleaf interchange. The new interchange features direct freeway-to-freeway connector ramps that now increase traffic capacity and improve overall safety and traffic operations in the area. With the new direct-connector ramps, drivers coming off of the San Mateo-Hayward Bridge can access Interstate 880 without having to compete with traffic headed onto east Route 92 from south Interstate 880. A Caltrans landscaping project will be undertaken in 2012.



Aerial View of Completed 880/92 Interchange Project



Duct Bank Conduit Installation



APPENDICES

A. TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through May 31, 2012 (A-1 and A-2).....	42
B. TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through May 31, 2012.....	48
C. Regional Measure 1 Program Cost Detail.....	49
D. Project Progress Diagrams.....	54
E. Project Photos.....	59
F. Glossary of Terms.....	70

Appendix A-1: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through May 31, 2012 (\$ Millions)

Contract a	AB 144 / SB 66 Budget (07/2005) c	Approved Changes d	Current Approved Budget (05/2012) e = c + d	Cost to Date (05/2012) f	Cost Forecast (05/2012) g	At- Completion Variance h = g - e
SFOBB East Span Replacement Project						
Capital Outlay Support	959.3	261.5	1,220.8	1,059.2	1,264.1	43.3
Capital Outlay Construction	4,492.2	588.0	5,080.2	4,151.0	5,145.0	64.8
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
Total	5,486.6	846.2	6,332.8	5,210.9	6,416.8	84.0
SFOBB West Approach Replacement						
Capital Outlay Support	120.0	(1.0)	119.0	118.9	119.0	-
Capital Outlay Construction	309.0	41.7	350.7	331.1	338.1	(12.6)
Total	429.0	40.7	469.7	450.0	457.1	(12.6)
SFOBB West Span Retrofit						
Capital Outlay Support	75.0	(0.2)	74.8	74.9	74.8	-
Capital Outlay Construction	232.9	(5.5)	227.4	227.4	227.4	-
Total	307.9	(5.7)	302.2	302.3	302.2	-
Richmond-San Rafael Bridge Retrofit						
Capital Outlay Support	134.0	(7.0)	127.0	126.8	127.0	-
Capital Outlay Construction	780.0	(90.5)	689.5	667.5	689.5	-
Total	914.0	(97.5)	816.5	794.3	816.5	-
Benicia-Martinez Bridge Retrofit						
Capital Outlay Support	38.1	-	38.1	38.1	38.1	-
Capital Outlay Construction	139.7	-	139.7	139.7	139.7	-
Total	177.8	-	177.8	177.8	177.8	-
Carquinez Bridge Retrofit						
Capital Outlay Support	28.7	0.1	28.8	28.8	28.8	-
Capital Outlay Construction	85.5	(0.1)	85.4	85.4	85.4	-
Total	114.2	-	114.2	114.2	114.2	-
San Mateo-Hayward Retrofit						
Capital Outlay Support	28.1	-	28.1	28.1	28.1	-
Capital Outlay Construction	135.4	(0.1)	135.3	135.3	135.3	-
Total	163.5	(0.1)	163.4	163.4	163.4	-
Vincent Thomas Bridge Retrofit (Los Angeles)						
Capital Outlay Support	16.4	-	16.4	16.4	16.4	-
Capital Outlay Construction	42.1	(0.1)	42.0	42.0	42.0	-
Total	58.5	(0.1)	58.4	58.4	58.4	-
San Diego-Coronado Bridge Retrofit						
Capital Outlay Support	33.5	(0.3)	33.2	33.2	33.2	-
Capital Outlay Construction	70.0	(0.6)	69.4	69.4	69.4	-
Total	103.5	(0.9)	102.6	102.6	102.6	-

Appendix A-1: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through May 31, 2012 (\$ Millions) Cont.

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (05/2012)	Cost to Date (05/2012)	Cost Forecast (05/2012)	At- Completion Variance
a	c	d	e = c + d	f	g	h = g - e
Antioch Bridge						
Capital Outlay Support	-	31.0	31.0	16.5	31.0	-
Capital Outlay Support by BATA				6.2		
Capital Outlay Construction	-	51.0	51.0	44.4	50.8	(0.2)
Total	-	82.0	82.0	67.1	81.8	(0.2)
Dumbarton Bridge						
Capital Outlay Support	-	56.0	56.0	28.3	56.0	-
Capital Outlay Support by BATA				6.0		
Capital Outlay Construction	-	92.7	92.7	44.5	83.5	(9.2)
Total	-	148.7	148.7	78.8	139.5	(9.2)
Subtotal Capital Outlay Support	1,433.1	340.1	1,773.2	1,581.4	1,816.5	43.3
Subtotal Capital Outlay	6,286.8	676.5	6,963.3	5,937.7	7,006.1	42.8
Subtotal Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
Miscellaneous Program Costs	30.0	-	30.0	25.5	30.0	-
Subtotal Toll Bridge Seismic Retrofit Program	7,785.0	1,013.3	8,798.3	7,545.3	8,860.3	62.0
Net Programmatic Risks*	-	-	-	-	92.0	92.0
Program Contingency	900.0	(616.3)	283.7	-	129.7	(154.0)
Total Toll Bridge Seismic Retrofit Program ¹	8,685.0	397.0	9,082.0	7,545.3	9,082.0	-

¹ Figures may not sum up to totals due to rounding effects.

Appendix A-2: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through May 31, 2012 (\$ Millions)

Bridge	AB 144 Baseline Budget	TBPOC Current Approved Budget	Expenditures to date and Encumbrances as of May 2012 see Note (1)	Estimated costs not yet spent or Encumbered as of May 2012	Total Forecast as of May 2012
a	b	c	d	e	f = d + e
Other Completed Projects					
Capital Outlay Support	144.9	144.6	144.6	-	144.6
Capital Outlay	472.6	471.9	472.8	(1.0)	471.8
Total	617.5	616.5	617.4	(1.0)	616.4
Richmond-San Rafael					
Capital Outlay Support	134.0	127.0	126.8	0.2	127.0
Capital Outlay	698.0	689.5	667.5	22.0	689.5
Project Reserves	82.0	-	-	-	-
Total	914.0	816.5	794.3	22.2	816.5
West Span Retrofit					
Capital Outlay Support	75.0	74.8	118.8	(44.0)	74.8
Capital Outlay	232.9	227.4	345.8	(118.4)	227.4
Total	307.9	302.2	464.6	(162.4)	302.2
West Approach					
Capital Outlay Support	120.0	119.0	118.9	0.1	119.0
Capital Outlay	309.0	350.7	345.8	(7.7)	338.1
Total	429.0	469.7	464.7	(7.6)	457.1
SFOBB East Span - Skyway					
Capital Outlay Support	197.0	181.2	181.2	-	181.2
Capital Outlay	1,293.0	1,245.2	1,237.2	8.0	1,245.2
Total	1,490.0	1,426.4	1,418.4	8.0	1,426.4
SFOBB East Span - SAS - Superstructure					
Capital Outlay Support	214.6	419.0	390.7	73.6	464.3
Capital Outlay	1,753.7	2,046.8	1,677.5	380.5	2,058.0
Total	1,968.3	2,465.8	2,068.2	454.1	2,522.3
SFOBB East Span - SAS - Foundations					
Capital Outlay Support	62.5	37.6	37.6	-	37.6
Capital Outlay	339.9	305.1	309.3	(4.3)	305.0
Total	402.4	342.7	346.9	(4.3)	342.6
Small YBI Projects					
Capital Outlay Support	10.6	10.6	10.2	0.4	10.6
Capital Outlay	15.6	15.6	15.5	0.2	15.7
Total	26.2	26.2	25.7	0.6	26.3
YBI Detour					
Capital Outlay Support	29.5	90.7	88.9	(1.2)	87.7
Capital Outlay	131.9	492.8	492.9	(10.1)	482.8
Total	161.4	583.5	581.8	(11.3)	570.5
YBI- Transition Structures					
Capital Outlay Support	78.7	106.4	76.8	34.6	111.4
Capital Outlay	299.4	262.0	133.5	193.2	326.7
Total	378.1	368.4	210.3	227.8	438.1

Appendix A-2: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through May 31, 2012 (\$ Millions) Cont.

Contract	AB 144 Baseline Budget	TBPOC Current Approved Budget	Expenditures to date and Encumbrances as of May 2012 see Note (1)	Estimated Costs not yet spent or Encumbered as of May 2012	Total Forecast as of May 2012
a	b	c	d	e	f = d + e
Oakland Touchdown					
Capital Outlay Support	74.4	108.9	96.5	27.3	123.8
Capital Outlay	283.8	334.6	250.6	76.7	327.3
Total	358.2	443.5	347.1	104.0	451.1
East Span Other Small Projects					
Capital Outlay Support	212.3	206.5	197.9	8.7	206.6
Capital Outlay	170.8	170.7	118.6	36.0	154.6
Total	383.1	377.2	316.5	44.7	361.2
Existing Bridge Demolition					
Capital Outlay Support	79.7	59.9	2.2	38.7	40.9
Capital Outlay	239.2	239.1	-	237.3	237.3
Total	318.9	299.0	2.2	276.0	278.2
Antioch Bridge					
Capital Outlay Support	-	31.0	16.7	8.1	24.8
Capital Outlay Support by BATA			6.2	-	6.2
Capital Outlay	-	51.0	47.5	3.3	50.8
Total	-	82.0	70.4	11.4	81.8
Dumbarton Bridge					
Capital Outlay Support	-	56.0	28.4	21.6	50.0
Capital Outlay Support by BATA			6.0	-	6.0
Capital Outlay	-	92.7	55.8	27.7	83.5
Total	-	148.7	90.2	49.3	139.5
Miscellaneous Program Costs	30.0	30.0	25.5	4.5	30.0
Total Capital Outlay Support	1,463.2	1,803.2	1,673.9	172.6	1,846.5
Total Capital Outlay	6,321.8	6,995.1	6,170.3	843.5	7,013.8
Program Total ¹	7,785.0	8,798.3	7,844.2	1,016.1	8,860.3

(1). Funds allocated to project or contract for Capital Outlay and Support needs includes Capital Outlay Support total allocation for FY 06/07.

(2). BSA provided a distribution of program contingency in December 2004 based in Bechtel Infrastructure Corporation input.
This Column is subject to revision upon completion of Department's risk assessment update.

(3) Total Capital Outlay Support includes program indirect costs.

¹ Figures may not sum up to totals due to rounding effects.

Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through May 31, 2012 (\$ Millions)

Contract a	AB 144 / SB 66 Budget (07/2005) c	Approved Changes d	Current Approved Budget (05/2012) e = c + d	Cost to Date (05/2012) f	Cost Forecast (05/2012) g	At- Completion Variance h = g - e
San Francisco-Oakland Bay Bridge East Span Replacement Project						
East Span - SAS Superstructure						
Capital Outlay Support	214.6	204.4	419.0	378.0	464.3	45.3
Capital Outlay Construction	1,753.7	293.1	2,046.8	1,675.5	2,058.0	11.2
Total	1,968.3	497.5	2,465.8	2,053.5	2,522.3	56.5
SAS W2 Foundations						
Capital Outlay Support	10.0	(0.8)	9.2	9.2	9.2	-
Capital Outlay Construction	26.4	0.1	26.5	26.5	26.4	(0.1)
Total	36.4	(0.7)	35.7	35.7	35.6	(0.1)
YBI South/South Detour						
Capital Outlay Support	29.4	61.3	90.7	87.7	87.7	(3.0)
Capital Outlay Construction	131.9	360.9	492.8	466.1	482.8	(10.0)
Total	161.3	422.2	583.5	553.8	570.5	(13.0)
East Span - Skyway						
Capital Outlay Support	197.0	(15.8)	181.2	181.2	181.2	-
Capital Outlay Construction	1,293.0	(47.8)	1,245.2	1,237.2	1,245.2	-
Total	1,490.0	(63.6)	1,426.4	1,418.4	1,426.4	-
East Span - SAS E2/T1 Foundations						
Capital Outlay Support	52.5	(24.1)	28.4	28.4	28.4	-
Capital Outlay Construction	313.5	(34.9)	278.6	274.8	278.6	-
Total	366.0	(59.0)	307.0	303.2	307.0	-
YBI Transition Structures (see notes below)						
Capital Outlay Support	78.7	27.7	106.4	72.3	111.4	5.0
Capital Outlay Construction	299.3	(37.3)	262.0	130.2	326.7	64.7
Total	378.0	(9.6)	368.4	202.5	438.1	69.7
* YBI- Transition Structures						
Capital Outlay Support			16.4	16.4	16.4	-
Capital Outlay Construction			-	-	-	-
Total			16.4	16.4	16.4	-
* YBI- Transition Structures Contract No. 1						
Capital Outlay Support			57.0	43.6	59.8	2.8
Capital Outlay Construction			199.7	130.2	243.6	43.9
Total			256.7	173.8	303.4	46.7
* YBI- Transition Structures Contract No. 2						
Capital Outlay Support			32.0	12.3	34.2	2.2
Capital Outlay Construction			59.0	-	79.8	20.8
Total			91.0	12.3	114.0	23.0
* YBI- Transition Structures Contract No. 3 Landscape						
Capital Outlay Support			1.0	-	1.0	-
Capital Outlay Construction			3.3	-	3.3	-
Total			4.3	-	4.3	-

Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through May 31, 2012 (\$ Millions) Cont.

Contract a	AB 144 / SB 66 Budget (07/2005) c	Approved Changes d	Current Approved Budget (05/2012) e = c + d	Cost to Date (05/2012) f	Cost Forecast (05/2012) g	At- Completion Variance h = g - e
Oakland Touchdown (see notes below)						
Capital Outlay Support	74.4	34.5	108.9	92.1	123.8	14.9
Capital Outlay Construction	283.8	50.8	334.6	208.7	327.3	(7.3)
Total	358.2	85.3	443.5	300.8	451.1	7.6
* OTD Prior-to-Split Costs						
Capital Outlay Support			21.7	20.0	21.7	-
Capital Outlay Construction			-	-	-	4.4
Total			21.7	20.0	21.7	4.4
* OTD Submarine Cable(1)						
Capital Outlay Support			0.9	0.9	0.9	-
Capital Outlay Construction			9.6	5.7	9.6	-
Total			10.5	6.6	10.5	-
* OTD No. 1 (Westbound)						
Capital Outlay Support			47.3	51.2	51.3	4.0
Capital Outlay Construction			212.0	203.0	203.3	(8.7)
Total			259.3	254.2	254.6	(4.7)
* OTD No. 2 (Eastbound)						
Capital Outlay Support			22.5	13.6	35.3	12.8
Capital Outlay Construction			62.0	-	56.3	(5.7)
Total			84.5	13.6	91.6	7.1
* OTD Touchdown 2 Detour(2)						
Capital Outlay Support			15.0	5.6	13.1	(1.9)
Capital Outlay Construction			51.0	-	53.7	2.7
Total			66.0	5.6	66.8	0.8
* OTD Electrical Systems						
Capital Outlay Support			1.5	0.8	1.5	-
Capital Outlay Construction			-	-	4.4	4.4
Total			1.5	0.8	5.9	4.4
Existing Bridge Demolition						
Capital Outlay Support	79.7	(19.8)	59.9	2.2	40.9	(19.0)
Capital Outlay Construction	239.2	(0.1)	239.1	-	237.3	(1.8)
Total	318.9	(19.9)	299.0	2.2	278.2	(20.8)
* Cantilever Section						
Capital Outlay Support			-	-	15.0	
Capital Outlay Construction			-	-	60.4	
Total			-	-	75.4	
* 504/288 Sections						
Capital Outlay Support			-	2.2	25.9	
Capital Outlay Construction			-	-	176.9	
Total			-	2.2	202.8	
YBI/SAS Archeology						
Capital Outlay Support	1.1	-	1.1	1.1	1.1	-
Capital Outlay Construction	1.1	-	1.1	1.1	1.1	-
Total	2.2	-	2.2	2.2	2.2	-

Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through May 31, 2012 (\$ Millions) Cont.

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (05/2012)	Cost to Date (05/2012)	Cost Forecast (05/2012)	At-Completion Variance
a	c	d	e = c + d	f	g	h = g - e
YBI - USCG Road Relocation						
Capital Outlay Support	3.0	-	3.0	2.7	3.0	-
Capital Outlay Construction	3.0	-	3.0	2.8	3.0	-
Total	6.0	-	6.0	5.5	6.0	-
YBI - Substation and Viaduct						
Capital Outlay Support	6.5	-	6.5	6.4	6.5	-
Capital Outlay Construction	11.6	-	11.6	11.3	11.6	-
Total	18.1	-	18.1	17.7	18.1	-
Oakland Geofill						
Capital Outlay Support	2.5	-	2.5	2.5	2.5	-
Capital Outlay Construction	8.2	-	8.2	8.2	8.2	-
Total	10.7	-	10.7	10.7	10.7	-
Pile Installation Demonstration Project						
Capital Outlay Support	1.8	-	1.8	1.8	1.8	-
Capital Outlay Construction	9.3	(0.1)	9.2	9.2	9.3	-
Total	11.1	(0.1)	11.0	11.0	11.1	-
Stormwater Treatment Measures						
Capital Outlay Support	6.0	2.2	8.2	8.2	8.2	-
Capital Outlay Construction	15.0	3.3	18.3	16.9	18.3	-
Total	21.0	5.5	26.5	25.1	26.5	-
Right-of-Way and Environmental Mitigation						
Capital Outlay Support	-	-	-	-	-	-
Capital Outlay & Right-of-Way	72.4	-	72.4	51.7	80.4	8.0
Total	72.4	-	72.4	51.7	80.4	8.0
Sunk Cost - Existing East Span Retrofit						
Capital Outlay Support	39.5	-	39.5	39.5	39.5	-
Capital Outlay Construction	30.8	-	30.8	30.8	30.8	-
Total	70.3	-	70.3	70.3	70.3	-
Other Capital Outlay Support						
Environmental Phase	97.7	-	97.7	97.8	97.7	-
Pre-Split Project Expenditures	44.9	-	44.9	44.9	44.9	-
Non-Project Specific Costs	20.0	(8.0)	12.0	3.2	12.0	-
Total	162.6	(8.0)	154.6	145.9	154.6	-
Subtotal Capital Outlay Support	959.3	261.5	1,220.8	1,059.2	1,264.1	43.3
Subtotal Capital Outlay Construction	4,492.2	588.0	5,080.2	4,151.0	5,145.0	64.8
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
						-
Total SFOBB East Span Replacement Project	5,486.6	846.2	6,332.8	5,210.9	6,416.8	84.0

¹ Figures may not sum up to totals due to rounding effects.

Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (05/2012)	Cost to Date (05/2012)	Cost Forecast (05/2012)	At- Completion Variance
a	c	d	e = c + d	f	g	h = g - e
New Benicia-Martinez Bridge Project						
New Bridge						
Capital Outlay Support						
BATA Funding	84.9	7.2	92.1	91.9	92.1	-
Non-BATA Funding	-	0.1	0.1	0.1	0.1	-
Subtotal	84.9	7.3	92.2	92.0	92.2	-
Capital Outlay Construction			-			-
BATA Funding	661.9	94.6	756.5	753.7	756.5	-
Non-BATA Funding	10.1	-	10.1	10.1	10.1	-
Subtotal	672.0	94.6	766.6	763.8	766.6	-
Total	756.9	101.9	858.8	855.8	858.8	-
I-680/I-780 Interchange Reconstruction						
Capital Outlay Support						
BATA Funding	24.9	5.2	30.1	30.1	30.1	-
Non-BATA Funding	1.4	5.2	6.6	6.2	6.6	-
Subtotal	26.3	10.4	36.7	36.3	36.7	-
Capital Outlay Construction						
BATA Funding	54.7	26.9	81.6	77.1	81.6	-
Non-BATA Funding	21.6	-	21.6	21.7	21.7	0.1
Subtotal	76.3	26.9	103.2	98.8	103.3	0.1
Total	102.6	37.3	139.9	135.1	140.0	0.1
I-680/Marina Vista Interchange Reconstruction						
Capital Outlay Support	18.3	1.9	20.2	20.2	20.2	-
Capital Outlay Construction	51.5	4.9	56.4	56.1	56.4	-
Total	69.8	6.8	76.6	76.3	76.6	-
New Toll Plaza and Administration Building						
Capital Outlay Support	11.9	3.8	15.7	15.7	15.7	-
Capital Outlay Construction	24.3	2.0	26.3	25.1	26.3	-
Total	36.2	5.8	42.0	40.8	42.0	-
Existing Bridge & Interchange Modifications						
Capital Outlay Support						
BATA Funding	4.3	13.7	18.0	18.0	18.0	-
Non-BATA Funding	-	0.9	0.9	0.8	0.9	-
Subtotal	4.3	14.6	18.9	18.8	18.9	-
Capital Outlay Construction						
BATA Funding	17.2	32.8	50.0	37.2	50.0	-
Non-BATA Funding	-	9.5	9.5	-	9.5	-
Subtotal	17.2	42.3	59.5	37.2	59.5	-
Total	21.5	56.9	78.4	56.0	78.4	-
Other Contracts						
Capital Outlay Support	11.4	(0.9)	10.5	9.7	10.5	-
Capital Outlay Construction	20.3	3.3	23.6	18.6	23.6	-
Capital Outlay Right-of-Way	20.4	(0.1)	20.3	17.0	20.3	-
Total	52.1	2.3	54.4	45.3	54.4	-

Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions) Cont.

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (05/2012)	Cost to Date (05/2012)	Cost Forecast (05/2012)	At- Completion Variance
a	c	d	e = c + d	f	g	h = g - e
New Benicia-Martinez Bridge Project continued...						
Subtotal BATA Capital Outlay Support	155.7	30.9	186.6	185.6	186.6	-
Subtotal BATA Capital Outlay Construction	829.9	164.5	994.4	967.8	994.4	-
Subtotal Capital Outlay Right-of-Way	20.4	(0.1)	20.3	17.0	20.3	-
Subtotal Non-BATA Capital Outlay Support	1.4	6.2	7.6	7.1	7.6	-
Subtotal Non-BATA Capital Outlay Construction	31.7	9.5	41.2	31.8	41.3	0.1
Project Reserves	20.8	1.6	22.4	-	22.3	(0.1)
Total New Benicia-Martinez Bridge Project						
Notes:	1,059.9	212.6	1,272.5	1,209.3	1,272.5	-
Includes EAs 00601_,00603_,00605_,00606_,00608_,00609_,0060A_,0060C_,0060E_,0060F_,0060G_,0060H_, and all Project Right-of-Way						
Carquinez Bridge Replacement Project						
New Bridge						
Capital Outlay Support	60.5	(0.3)	60.2	60.2	60.2	-
Capital Outlay Construction	253.3	2.7	256.0	255.9	256.0	-
Total	313.8	2.4	316.2	316.1	316.2	-
Crockett Interchange Reconstruction						
Capital Outlay Support	32.0	(0.1)	31.9	31.9	31.9	-
Capital Outlay Construction	73.9	(1.9)	72.0	71.9	72.0	-
Total	105.9	(2.0)	103.9	103.8	103.9	-
Existing 1927 Bridge Demolition						
Capital Outlay Support	16.1	(0.3)	15.8	15.9	15.8	-
Capital Outlay Construction	35.2	-	35.2	35.0	35.2	-
Total	51.3	(0.3)	51.0	50.9	51.0	-
Other Contracts						
Capital Outlay Support	15.8	0.9	16.7	16.5	16.7	-
Capital Outlay Construction	18.8	(1.2)	17.6	16.4	17.6	-
Capital Outlay Right-of-Way	10.5	(0.1)	10.4	10.0	10.4	-
Total	45.1	(0.4)	44.7	42.9	44.7	-
Subtotal BATA Capital Outlay Support						
Subtotal BATA Capital Outlay Construction	124.4	0.2	124.6	124.5	124.6	-
Subtotal Capital Outlay Right-of-Way	381.2	(0.4)	380.8	379.2	380.8	-
Project Reserves	10.5	(0.1)	10.4	10.0	10.4	-
	12.1	(9.7)	2.4	-	2.4	-
Total Carquinez Bridge Replacement Project ¹						
	528.2	(10.0)	518.2	513.7	518.2	-
Notes						
Other Contracts include EAs 01301_,01302_,01303_,01304_,01305_,01306_,01307_,01308_,01309_,0130A_,0130C_,0130D_,0130F_,0130G_,0130H_,0130J_,00453_,00493_,04700_,00607_,2A270_,and 29920_ and all Project Right-of-Way						

¹ Figures may not sum up to totals due to rounding effects.

Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions) Cont.

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (05/2012)	Cost to Date (05/2012)	Cost Forecast (05/2012)	At- Completion Variance
a	c	d	e = c + d	f	g	h = g - e
Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation						
Capital Outlay Support						
BATA Funding	2.2	(0.8)	1.4	1.4	1.4	-
Non-BATA Funding	8.6	1.8	10.4	10.4	10.4	-
Subtotal	10.8	1.0	11.8	11.8	11.8	-
Capital Outlay Construction						
BATA Funding	40.2	(6.8)	33.4	33.3	33.4	-
Non-BATA Funding	51.1	-	51.1	51.1	51.1	-
Subtotal	91.3	(6.8)	84.5	84.4	84.5	-
Project Reserves	-	0.8	0.8	-	0.8	-
Total	102.1	(5.0)	97.1	96.2	97.1	-
Richmond-San Rafael Bridge Deck Overlay Rehabilitation						
Capital Outlay Support						
BATA Funding	4.0	(0.7)	3.3	3.3	3.3	-
Non-BATA Funding	4.0	(4.0)	-	-	-	-
Subtotal	8.0	(4.7)	3.3	3.3	3.3	-
Capital Outlay Construction	16.9	(0.6)	16.3	16.3	16.3	-
Project Reserves	0.1	0.3	0.4	-	0.4	-
Total	25.0	(5.0)	20.0	19.6	20.0	-
Richmond Parkway Project (RM 1 Share Only)						
Capital Outlay Support	-	-	-	-	-	-
Capital Outlay Construction	5.9	-	5.9	4.3	5.9	-
Total	5.9	-	5.9	4.3	5.9	-
San Mateo-Hayward Bridge Widening						
Capital Outlay Support	34.6	(0.5)	34.1	34.1	34.1	-
Capital Outlay Construction	180.2	(6.1)	174.1	174.1	174.1	-
Capital Outlay Right-of-Way	1.5	(0.9)	0.6	0.6	0.6	-
Project Reserves	1.5	(0.5)	1.0	-	1.0	-
Total	217.8	(8.0)	209.8	208.8	209.8	-
I-880/SR-92 Interchange Reconstruction						
Capital Outlay Support	28.8	35.8	64.6	62.3	64.6	-
Capital Outlay Construction						
BATA Funding	85.2	68.4	153.6	150.2	153.6	-
Non-BATA Funding	9.6	-	9.6	-	9.6	-
Subtotal	94.8	68.4	163.2	150.2	163.2	-
Capital Outlay Right-of-Way	9.9	7.3	17.2	14.7	17.2	-
Project Reserves	0.3	(0.3)	-	-	-	-
Total	133.8	111.2	245.0	227.2	245.0	-
Bayfront Expressway Widening						
Capital Outlay Support	8.6	(0.2)	8.4	8.4	8.4	-
Capital Outlay Construction	26.5	(1.5)	25.0	24.9	25.0	-
Capital Outlay Right-of-Way	0.2	-	0.2	0.2	0.2	-
Project Reserves	0.8	(0.3)	0.5	-	0.5	-
Total	36.1	(2.0)	34.1	33.5	34.1	-

Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions) Cont.

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (05/2012)	Cost to Date (05/2012)	Cost Forecast (05/2012)	At- Completion Variance
a	c	d	e = c + d	f	g	h = g - e
US 101/University Avenue Interchange Modification						
Capital Outlay Support	-	-	-	-	-	-
Capital Outlay Construction	3.8	-	3.8	3.7	3.8	-
Total	3.8	-	3.8	3.7	3.8	-
Subtotal BATA Capital Outlay Support	358.3	64.7	423.0	419.6	423.0	-
Subtotal BATA Capital Outlay Construction	1,569.8	217.5	1,787.3	1,753.8	1,787.3	-
Subtotal Capital Outlay Right-of-Way	42.5	6.2	48.7	42.5	48.7	-
Subtotal Non-BATA Capital Outlay Support	14.0	4.0	18.0	17.5	18.0	-
Subtotal Non-BATA Capital Outlay Construction	92.4	9.5	101.9	82.9	102.0	0.1
Project Reserves	35.6	(8.1)	27.5	-	27.4	(0.1)
Total RM1 Program	2,112.6	293.8	2,406.4	2,316.3	2,406.4	-
Notes:	1 Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Includes Non-TBSRP Expenses for EA 0438U_ and 04157_					
	2 San Mateo-Hayward Bridge Widening includes EAs 00305_,04501_,04503_,04504_,04504_,04505_,04506_,04507_,04508_,04509_,27740_,27790_,04860_					

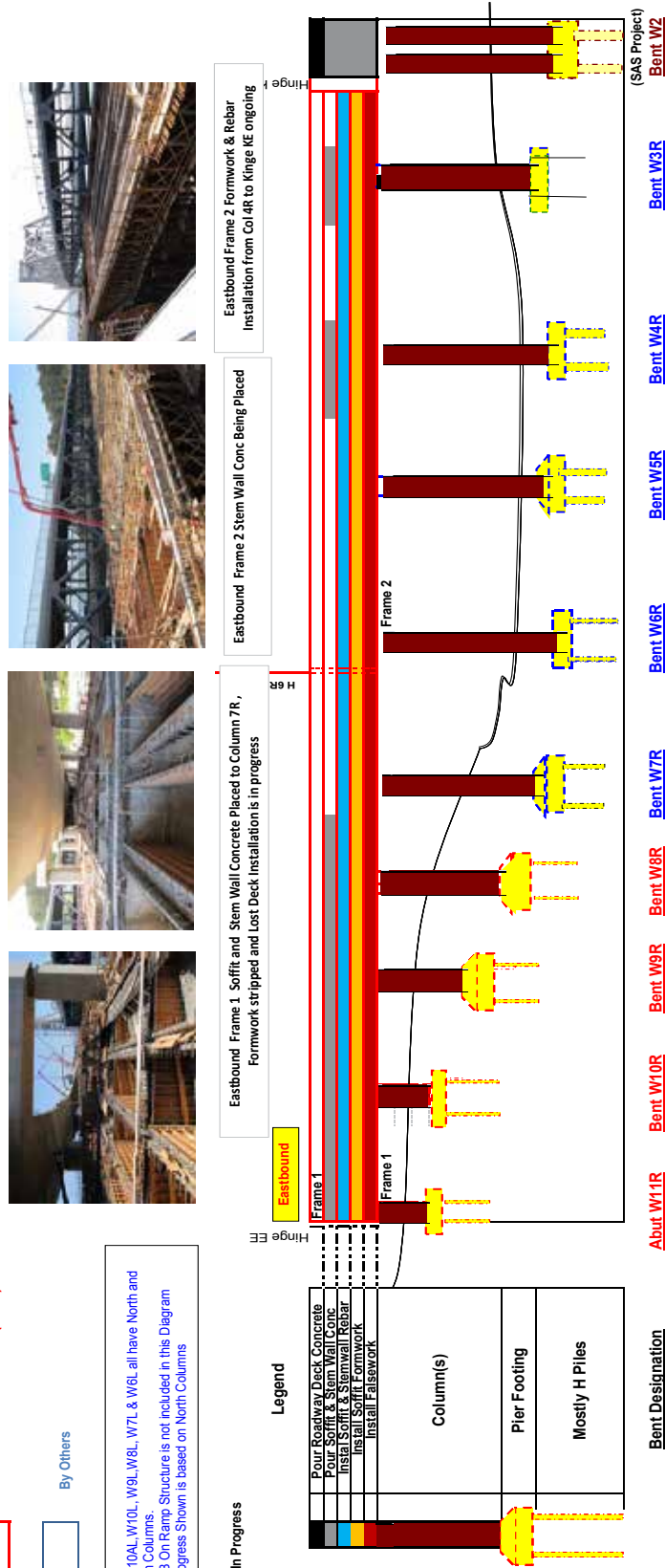
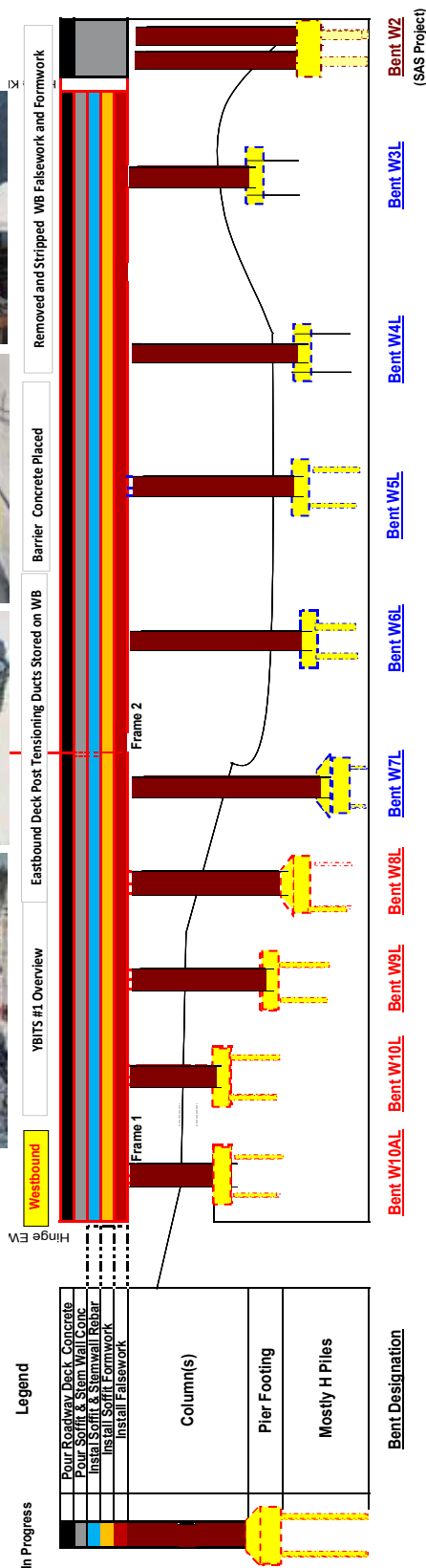


Overview of the Self-Anchored Suspension Bridge and Yerba Buena Island Transition Structures #1 Construction Progress

Appendix D: Progress Diagrams

Yerba Buena Island Transition Structures

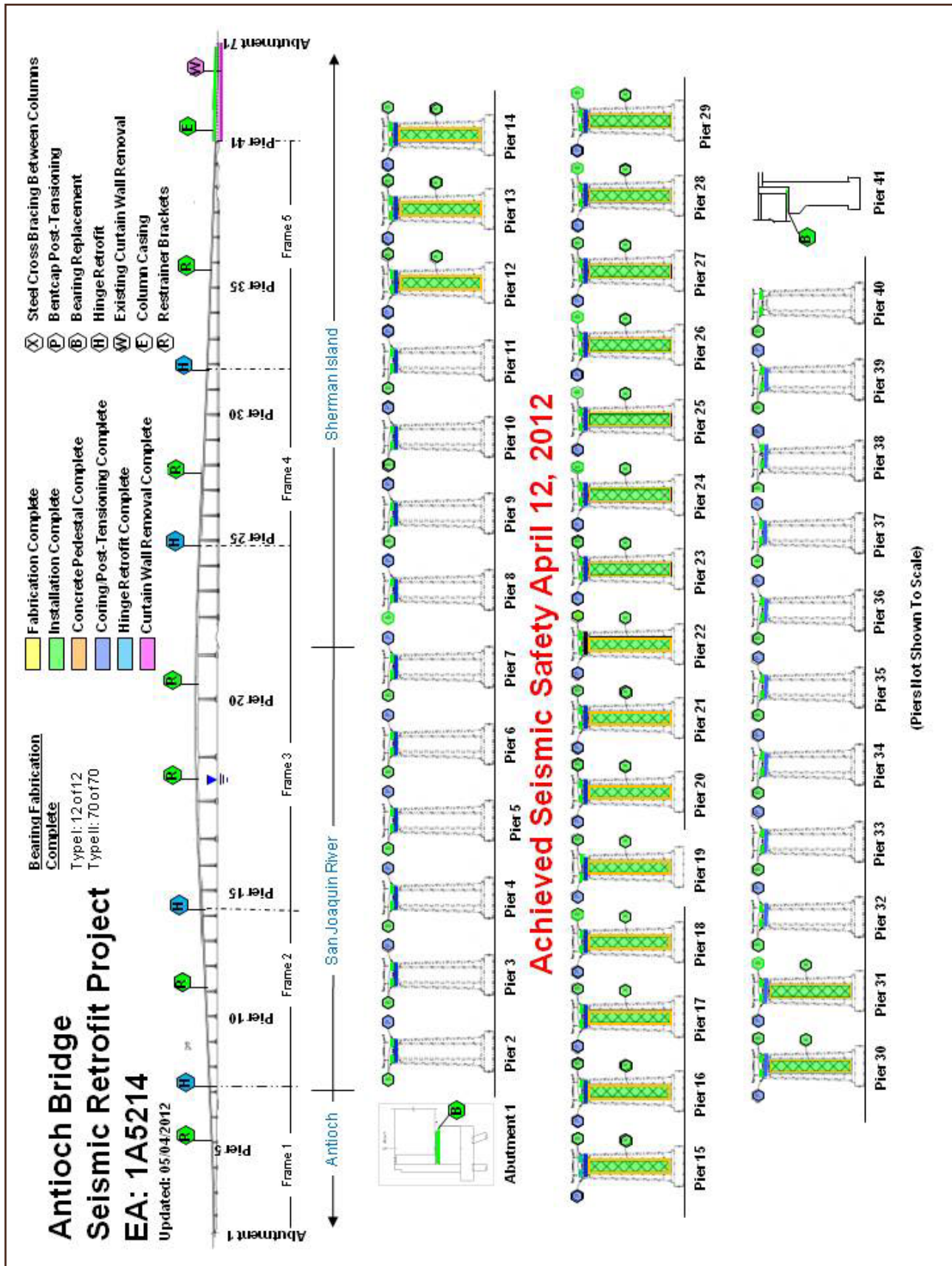
SOBB SEISMIC RETROFIT PROJECT YBITS #1 PROGRESS DIAGRAM as of May 24, 2012



Note:

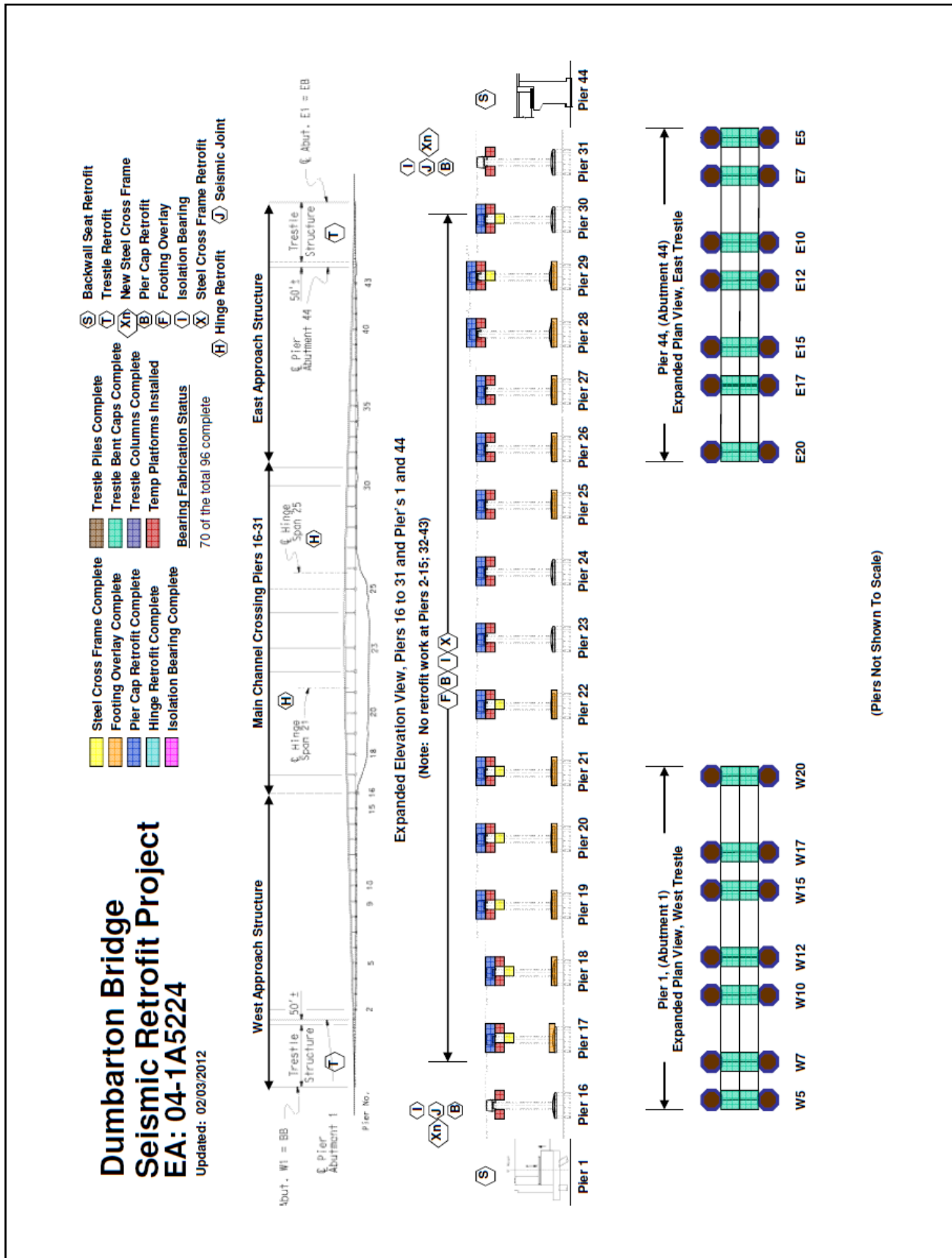
1. W10AL, W10L, W9L, W8L, W7L & W6L all have North and South Columns.
2. EB On Ramp Structure is not included in this Diagram
3. Progress Shown is based on North Columns

Appendix D: Progress Diagrams (cont.) Antioch Bridge



Appendix D: Progress Diagrams (cont.)

Dumbarton Bridge



Friction Clamp Installed on Pair of Suspenders on the Self-Anchored Suspension Bridge





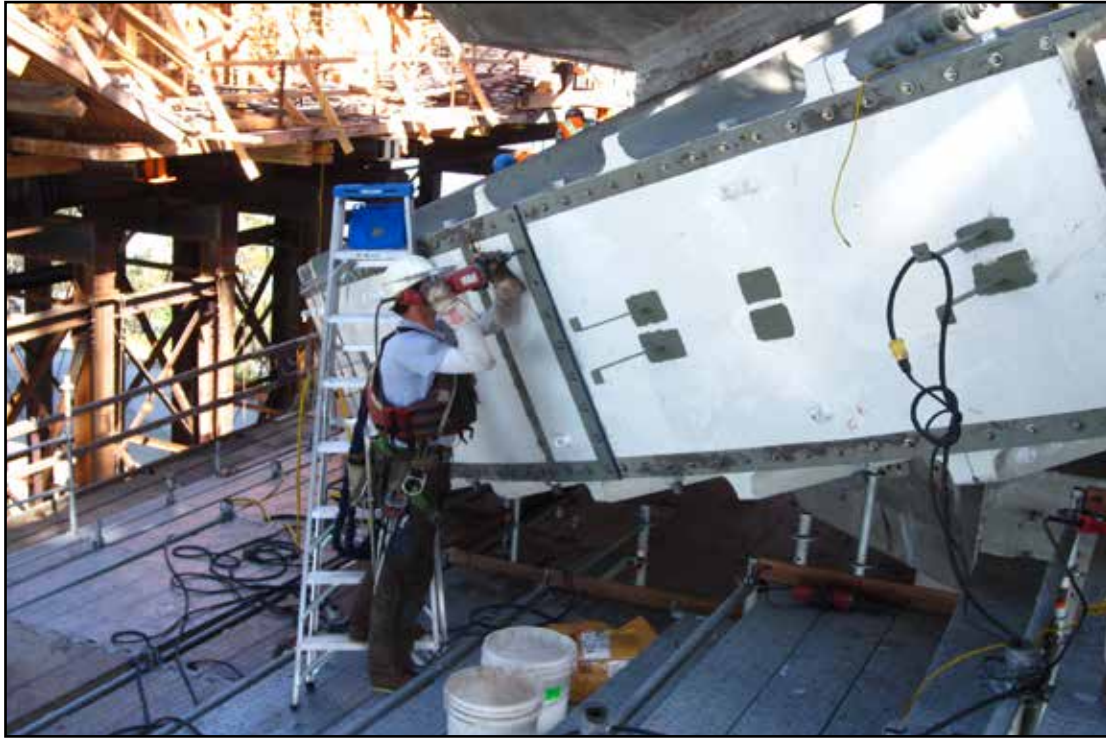
The East Bound Hinge K and Yerba Buena Island Transition Structure under Construction



Project Photos

Appendix E: Project Progress Photographs

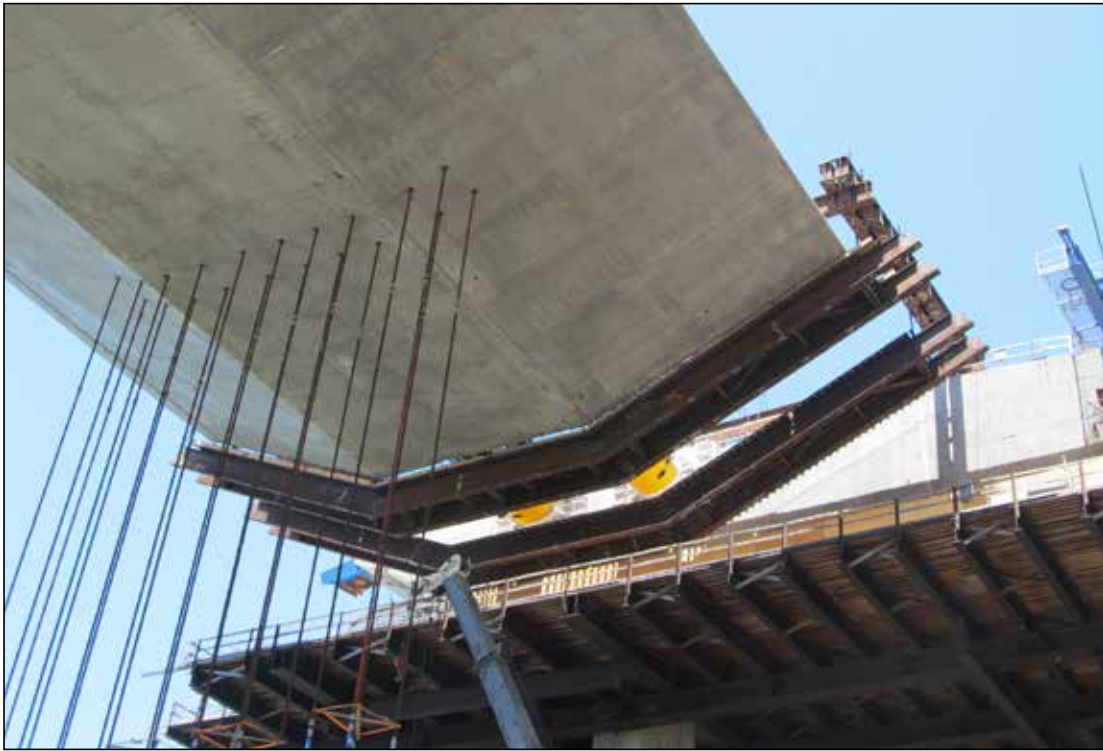
Self-Anchored Suspension Bridge Field Work



The Shroud Enclosure of the West Deviation Saddle Being Installed



Grinding off Mechanical Pipe Support at the Base of W2 Column



Hinge K Westbound Falsework Installation in Progress



Duct Bank Installation in Progress next to W2 Area



Suspension Bridge Roadway Box Being Placed

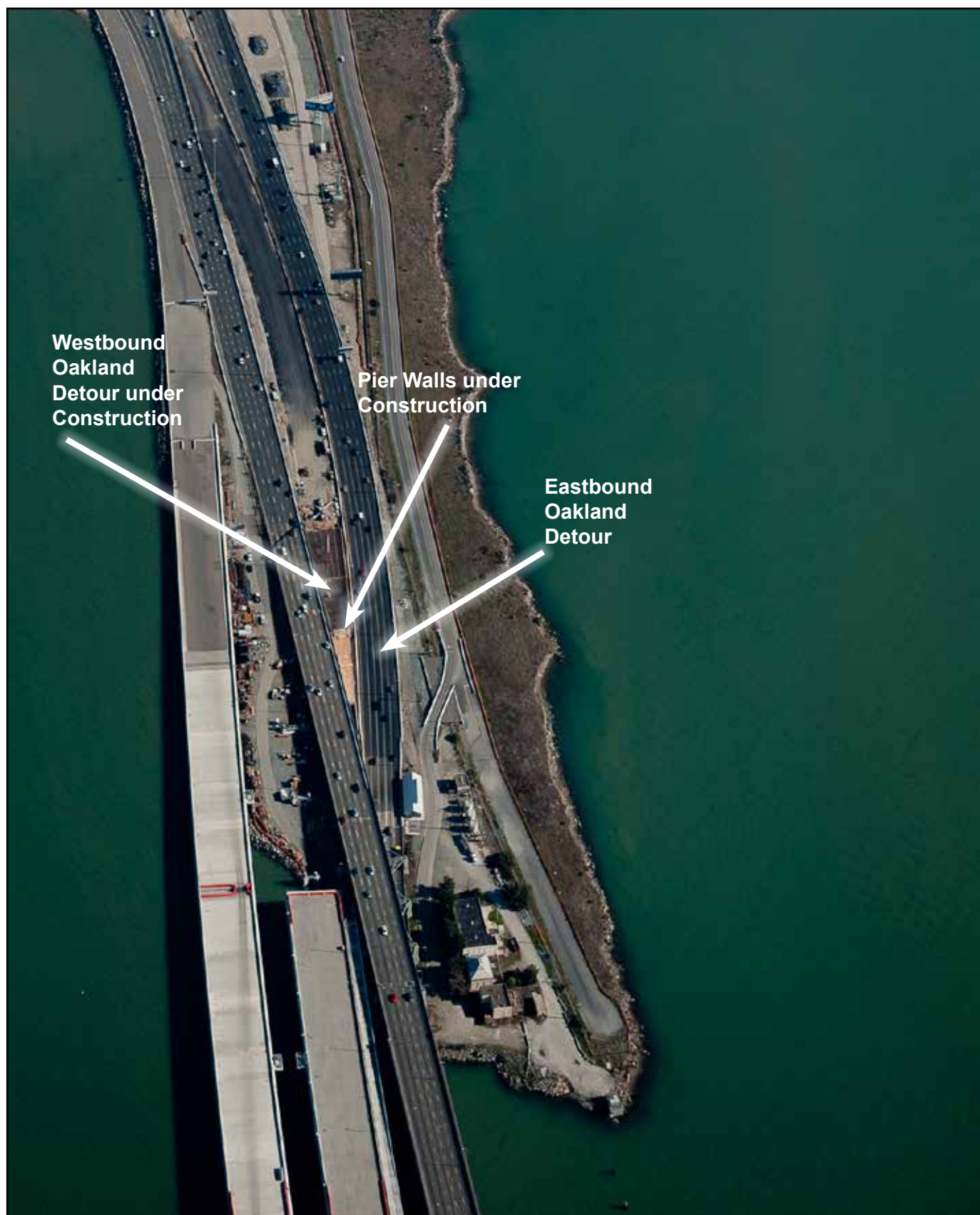


Suspenders Installed on the Self-Anchored Suspension Bridge Main Span

Appendix E: Project Progress Photographs

Westbound Oakland Detour

Before Opening to Traffic



After Opening to Traffic



Westbound Oakland Detour Construction Progress

Appendix E: Project Progress Photographs

Yerba Buena Island Transition Structure #1 Westbound



YBITS #1 Eastbound Frame #1 Stem Walls Poured



YBITS #1 Eastbound Frame #2 Construction Progress



YBITS #1 Eastbound Roadway Deck Construction Progress

Appendix E: Project Progress Photographs

Antioch Bridge



Antioch Bridge - Pier 41 Girders on Temporary Jacks prior to Installation of Isolation Bearings



Antioch Bridge - Welding of Jacking Stiffeners at Existing Girder Web

Appendix E: Project Progress Photographs

Dumbarton Bridge



Dumbarton Bridge - Ravenswood Pier Staging for Footing Overlay Work



Dumbarton Bridge - Pier 26 Footing Overlay - All Footing Overlay Completed Except Piers 23 & 24

Appendix F: Glossary of Terms

Glossary of Terms

AB 144/SB 66 BUDGET: The planned allocation of resources for the Toll Bridge Seismic Retrofit Program, or subordinate projects or contracts, as provided in Assembly Bill 144 and Senate Bill 66, signed into law by Governor Schwarzenegger on July 18, 2005 and September 29, 2005, respectively.

AB 144/SB 66 PROJECT COMPLETE BASELINE: The planned completion date for the Toll Bridge Seismic Retrofit Program or subordinate projects or contracts.

APPROVED CHANGES: For cost, changes to the AB 144/SB 66 Budget or BATA Budget as approved by the Bay Area Toll Authority Commission. For schedule, changes to the AB 144/SB 66 Project Complete Baseline approved by the Toll Bridge Program Oversight Committee, or changes to the BATA Project Complete Baseline approved by the Bay Area Toll Authority Commission.

AT COMPLETION VARIANCE or VARIANCE (cost): The mathematical difference between the Cost Forecast and the Current Approved Budget.

BATA BUDGET: The planned allocation of resources for the Regional Measure 1 Program, or subordinate projects or contracts as authorized by the Bay Area Toll Authority as of June 2005.

BATA PROJECT COMPLETE BASELINE: The planned completion date for the Regional Measure 1 Program or subordinate projects or contracts.

COST FORECAST: The current forecast of all of the costs that are projected to be expended so as to complete the given scope of the program, project, or contract.

COST TO DATE: The actual expenditures incurred by the program, project or contract as of the month and year shown.

CURRENT APPROVED BUDGET: The sum of the AB 144/SB 66 Budget or BATA Budget and Approved Changes.

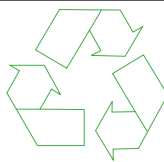
HINGE PIPE BEAMS: Pipes between roadway sections designed to move within their sleeves during expansion or contraction of the decks during minor events, such as changes in temperature. The beams are designed to absorb the energy of an earthquake by deforming in their middle or “fuse” section. Hinge pipe beams are also found at the western piers where the SAS connects to the YBITS (Hinge “K” pipe beams).

PROJECT COMPLETE CURRENT APPROVED SCHEDULE: The sum of the AB 144/SB 66 Project Complete Baseline or BATA Project Complete Baseline and Approved Changes.

PROJECT COMPLETE SCHEDULE FORECAST: The current projected date for the completion of the program, project, or contract.

SCHEDULE VARIANCE or VARIANCE (schedule): The mathematical difference expressed in months between the Project Complete Schedule Forecast and the Project Complete Current Approved Schedule.

% COMPLETE: % Complete is based on an evaluation of progress on the project, expenditures to date, and schedule.



100% Recyclable

This document, including the coil binding, is 100% recyclable

The information in this report is provided in accordance with California Government code Section 755. This document is one of a series of reports prepared for the Bay Area Toll Authority (BATA)/Metropolitan Transportation Commission (MTC) for the Toll Bridge Seismic Retrofit and Regional Measure 1 Programs. The contract value for the monitoring efforts, technical analysis, and field site works that contribute to these reports, as well as the report preparation and production is \$1,574,873.73.

URS

Bay Area Management Consultants
An Association of URS Corporation and Hatch Mott MacDonald

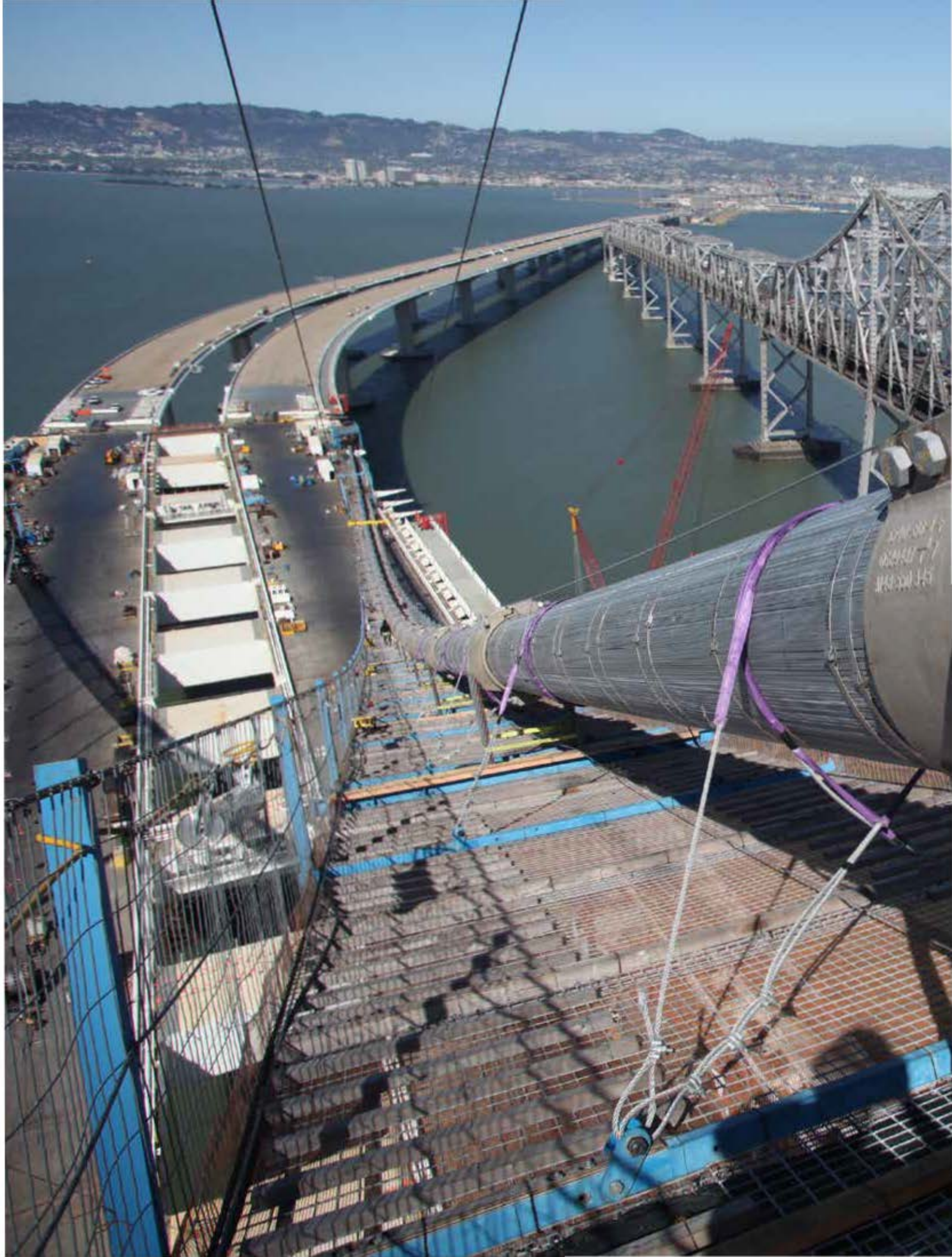


**Hatch Mott
MacDonald**



Parallel Wire Strands on North Main Span Looking West
towards the Self-Anchored Suspension Bridge Tower





Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** July 3, 2012

FR: Program Management Team (PMT)

RE: Agenda No. - 4a

Item- Program Issues
Communications Protocol

Recommendation:

For Information Only

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

A verbal update on website communications protocol will be provided at the TBPOC July 10, 2012 conference call.

Attachment(s):

N/A

ITEM 4: PROGRAM ISSUES

b. New Benicia-Martinez Bridge Foundations

(To be sent under separate cover)

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** July 3, 2012

FR: Stephen Maller, Deputy Director, CTC

RE: Agenda No. - 4c

Item- Program Issues
Bridge Opening Update

Recommendation:

For Information Only

Cost:

N/A

Schedule Impacts:

N/A

Discussion:

A verbal update on the New East Span opening activities will be provided at the TBPOC July 10, 2012 conference call.

Attachment(s):

N/A

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** July 3, 2012

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 5a

Item- San Francisco-Oakland Bay Bridge Updates
Yerba Buena Island Transition Structure (YBITS) No. 2
Addendum No. 4 Request

Recommendation:

APPROVAL

Cost:

Approximately \$381,000 increase

Schedule Impacts:

N/A

Discussion:

Staff requests approval for YBITS2 Addendum No. 4.

The items in this addendum request are described below. There are 17 separate items that affect approximately 119 plan sheets and revisions to specifications.

The elements of this addendum are:

1. Bike Path Railing Revisions - Changes to the railing details in the plans to incorporate lessons learned from Construction.
2. Revisions to Security Fencing - Changes to revise the layout of the fencing and add additional security measures, such as Anti-Climb Fencing and Cable Barrier System.
3. Removal of Nimitz Plateau from Scope of Work - Removal of the Nimitz Plateau from the scope of work including: sidewalk, irrigation items, historic stairs, drainage facilities, and electrical items. This work to be constructed in the YBI Ramps project.
4. Revisions to USCG Entrance Gate - The type of gate at the entrance to the USCG Facility will be revised.
5. Utility Plan Changes - Revisions to resolve Bidder Inquiries No. 51, 52, and 54.

6. Slope Stability Plan revisions - Revisions to resolve Bidder Inquiries No. 55 and 56.
7. Stage Construction Note Revision - Revision to resolve Bidder Inquiries No. 58.
8. Electrical Specification Revisions - Revisions to the electrical specifications to revise the materials used per lessons learned from Construction and to be consistent with other ongoing bay bridge projects.
9. Electrical Routing Changes on Bridge - Plan revisions to the electrical routing on the bridge.
10. Lane Closure Charts - Increase the number of times that the westbound off-ramp is allowed to be closed to allow the Contractor to bring equipment onto the existing Bay Bridge for demolition.
11. Curb Transition - Add curb transition detail to improve access for bikes from Hillcrest Road onto the bay bridge bike path.
12. Submittals with Bid - Revision to listing 1a in the special provisions, Section 2-1.03, "Submittals with Bid."
13. Clean and Paint Miscellaneous Facilities - Revisions to listing 5 in the Special Provisions, Section 10-1.113, "Clean and Paint Miscellaneous Facilities."
14. Species protection - Revision to monitoring frequency of migratory species Special Provisions, Section 5-1.17, "Species Protection."
15. Engineers approval - Require approval of Contractors Engineer's qualifications, Special Provisions 10-1.58, "Bridge Removal Portion Cantilever Truss"
16. Revise demolition design criteria plan sheet to add project specific requirements.
17. Revise Cantilever Truss Removal Sequence plan sheet to allow lowering of the Suspended Span.

Schedule background:

Advertisement date – 4/9/12

Mandatory pre-bid meeting – 6/14/12

Bid opening – 9/25/12

First working day – 2/2/13

Attachment(s):

N/A

ITEM 6: OTHER BUSINESS

BAY BRIDGE Family Day

Share history in the making
with your family!

Save
THE Date

Saturday, October 27, 2012

Where: Pier 7 Details to come...

